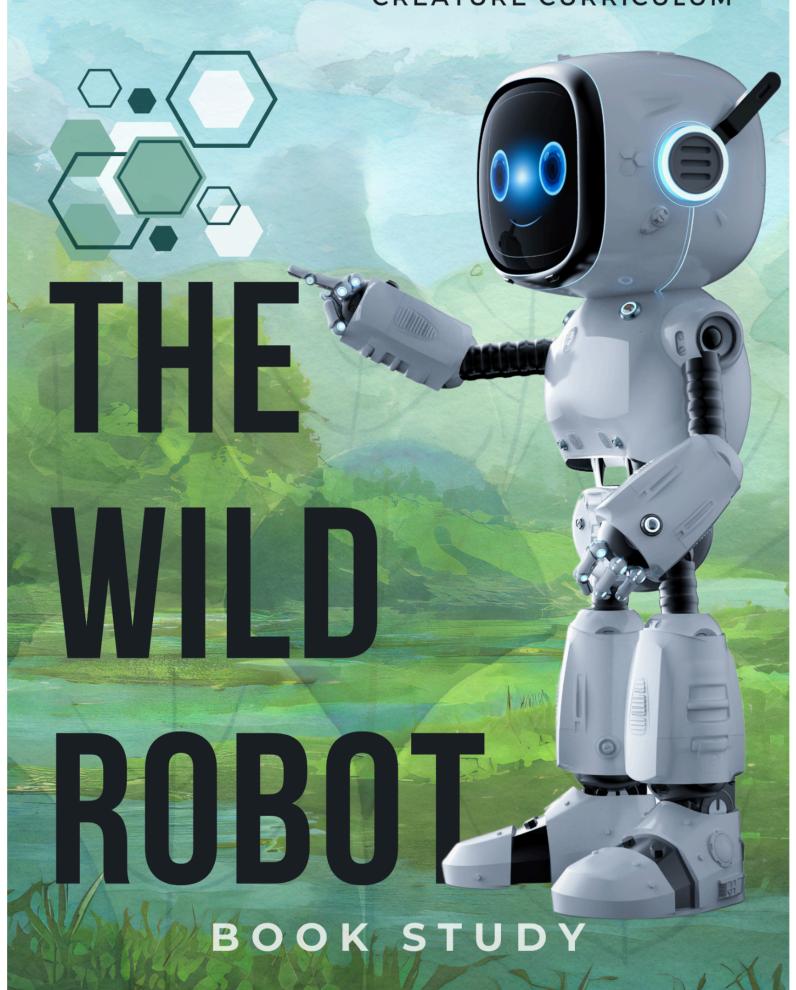
CREATURE CURRICULUM



# Welcome to "The Wild Robot" Home Learning Unit

Dear Families,

Welcome to an exciting journey with "The Wild Robot" by Peter Brown, a captivating tale that melds the wonders of nature with the intrigue of technology. This home learning unit is designed to enrich your family's reading experience, offering a blend of literature, science, creativity, and personal growth.

#### About the Book:

"The Wild Robot" introduces us to Roz, a robot who unexpectedly finds herself on a remote, wild island. She faces numerous challenges and adventures, learning to survive and interact with the natural world around her. The story is a heartwarming exploration of themes such as adaptation, friendship, and the intersection of technology and nature.

#### Through this unit, we aim to:

<u>Enhance Comprehension:</u> Dive deeper into the narrative, characters, and themes of "The Wild Robot," fostering a richer understanding of the story.

<u>Encourage Critical Thinking:</u> Engage in discussions and activities that prompt your child to think critically about the relationship between technology and nature, and other central themes.

<u>Inspire Creativity:</u> Participate in hands-on activities that complement the story, such as crafting your version of Roz, the robot protagonist.

<u>Foster Personal Growth:</u> Just like Roz, children will learn about adapting to changes and overcoming challenges, mirroring their own personal growth and resilience.

### What to Expect:

This unit is structured to align with the progression of the story, including:

- Guided reading sessions with thought-provoking questions.
- Creative projects and experiments related to the story's themes.
- Opportunities for reflection and personal connection to the story.
- Suggested extension activities for deeper exploration of key topics.
- So much more

### **Digital Download:**

This book study is designed to be used with the family; ages 5-12yrs. Activities are open ended, allowing every age to access learning that's right for their curiosity. Lesson plans have notes and suggestions on how to best adjust them to the age of your child, but ultimately you know your child best so it's up to you how you choose to challenge your family!

#### Terms of Use:

Please keep in mind that these files are meant for personal or classroom use only. You are not permitted to alter, sell or redistribute these materials in any way. Feel free to print them over and over again to use in your home or classroom! You are not permitted to share the download or allow other people to make copies of the printed product. This product has been priced fairly and we ask that you support the hard work put into this study by respecting these terms.

#### Share!

I'd love to see your family enjoying this book study! Be sure to share and tag us on Instagram if you choose to share your lessons. @magichomeschoolbus



"Creature Curriculum" is a meticulously crafted, year-long program designed to bring the marvels of the natural world right into your home. *Releasing May 2024* 

Journey through a variety of habitats - from the lushness of rainforests to the mysteries of the deep sea, the stark beauty of deserts, and the unexplored realms of subterranean caves. Each month opens a new chapter in a different ecosystem, revealing the magic and majesty of our natural world.

Meet the inhabitants of these ecosystems. From the majestic to the microscopic, every creature has a story to tell. As you traverse different habitats, you'll also explore the cultures and peoples connected to these environments. Understand how the land shapes lifestyles and beliefs, fostering a global perspective in your child. Delve into the science behind the habitats. Understand food chains, ecosystems, and the delicate balance that sustains life. It's more than a curriculum, it's a journey.

We hope you join us! - Kristen, Creature Curriculum

# **Table of Contents**

How to Use this Study Guide (please read)	5
Material List	7
Main Lesson Sketchbook	8
The Schedule	10
STEM Challenges	15
Exploring Robotics	32
Culinary Adventures	40
Nature + Survival Studies	55
Integrating Debate	60
Writers Workshop	69
Character Studies	76
Vocab Ventures	79
Beyond the Book	100

### How to Use this Study Guide + Materials

We are thrilled that you are embarking on this exciting journey with your child through our study of Peter Brown's "The Wild Robot." This program combines reading, critical thinking, and hands-on activities to enrich your child's learning experience.

#### First Step:

This unit study comes in two separate downloads. This, being the first which contains all of the information, explanations and lesson plans and guides. The second being the printables; which includes the items that need to be printed for the different activities. Decide whether you are going to print both documents or simply the Printables PDF. If you do print this Study Guide, go ahead and put it in a binder. It will make navigating the study so much easier and allow you to bounce back and forth between categories with ease.

### **Understanding the Categories:**

Our study is divided into the following categories: STEM Challenges, Culinary Adventures, Character Studies, Beyond the Book, Writers Workshop, Survival Studies, Integrating Debate, Exploring Robotics, and Vocab Ventures. Each category offers unique activities and learning opportunities related to the themes and events of "The Wild Robot." You can work through all of the categories, or simply choose the ones that align with your family's interests and educational goals.

#### Following Along with the Schedule:

As you progress through "The Wild Robot," you can follow our schedule to determine the most appropriate time to engage in each activity. This schedule is aligned with the book's chapters, ensuring that the activities are relevant to the events in the story.

For each chapter or set of chapters, the schedule will indicate which activity to do next. This approach helps to synchronize the story with our interactive activities, enhancing the connection between the reading and the learning experience.

### **Bringing the Book to Life:**

The goal of these activities is to animate the world of "The Wild Robot," allowing your children to immerse themselves fully in Roz's adventures and the book's rich themes.

When you reach an activity in the schedule, simply refer to the corresponding category section within our unit study. There, you'll find a detailed activity guide (or lesson plan) that explains how to conduct the activity, what materials are needed, and how it ties back to the book.

### Flexibility in Learning:

Remember, while we have a suggested schedule, feel free to adapt it to your family's pace and your child's interests. The unit study is designed to be flexible, allowing you to delve deeper into areas that particularly captivate your child's imagination and curiosity.

### Following Your Child's Lead:

<u>Interest-Led Learning:</u> We believe in the power of following a child's lead. Pay attention to what excites and engages your child within this study. This natural curiosity is a great guide to determining what to explore next.

<u>Balancing Goals and Fun:</u> While keeping educational goals in mind, remember that learning is most effective when it's enjoyable. This guide is as much about discovering joy in learning as it is about educational development.

### **Support and Community:**

- 1. We are here to support you on this journey. If you have questions, need clarification, or seek further resources, please don't hesitate to reach out.
- 2.We also encourage you to share your experiences and insights with other families navigating this guide. There's much to learn from each other's journeys.
- 3.We hope "The Wild Robot" and the accompanying activities provide your family with a memorable learning experience. Here's to a journey of discovery, imagination, and a whole lot of fun!

Please tag us @magichomeschoolbus and use the hashtags #magichomeschoolbus and #thewildrobot

6

### Complete List of Unit Study Materials

To fully engage in our study, we have compiled a list of resources that will be used throughout the study.. Having these items available will help your child participate in all the activities planned.

#### **Book**

"The Wild Robot" by Peter Brown.

### Main Lesson Book / Sketch Book

While optional, this is recommended and will serve as a personalized portfolio of your child's learning journey, showcasing their understanding, creativity, and progress (more info on the following page as well as alternatives)

### **Art Supplies**

Markers, crayons, watercolor paints, oil pastels, and/or colored pencils Construction paper, cardstock Scissors and glue

#### **STEM Build Materials**

Cardboard, Paper
Variety of Recycling; egg cartons, yogurt cups, soup cans
Clay, Playdough
Wood blocks, Scrap wood

### Nature + Survival

Binoculars/ Magnifying glass (optional)
Guide to local wildlife (optional)
Basic First Aid Kit
Firewood and a lighter/ flint/ matches
A compass

### **Additional Books**

A list of complementary picture and chapter books (provided separately) for additional reading \*affiliate links included to tried and tested items

# Organizing Your Child's "Wild Robot" Study in a Main Lesson Sketchbook

As you delve into the enriching world of "The Wild Robot" by Peter Brown, a main lesson book or sketchbook will be an invaluable tool for your child. While this is not mandatory, it does serve as a personalized portfolio of their learning journey, showcasing their understanding, creativity, and progress. Here's a guide on how you can help your child organize their work effectively in their book.

### **Choosing the Right Sketchbook:**

Opt for a sketchbook with full-sized pages (8.5x11 inches).

Look for a minimum of 30 sheets (60 pages)

Ensure the paper is thick enough to handle ink, paint, and other art materials (mixed media paper) so that you can use both the front and back of every sheet. (110lbs paper or thicker)

Sketchbooks are available on Amazon or at local craft stores.

### Organizing the Sketchbook:

#### Cover Page

Either the exterior cover or the first page inside should be the cover. Let your child decorate it however they would like to best represent them and their upcoming Wild Robot study.

### Artwork, Design Planning (20 pages):

Allocate 20-30 pages (10-15 sheets front and back) for various artwork and design projects. This will be where children practice their character sketches, landscape artwork and more. This section will also include the design plans for their robot builds and all other STEM projects.

### Character Studies (10 pages):

Dedicate 10 pages (5 sheets) for detailed studies of characters from the book, like Roz, the animals, and other key figures.

Encourage your child to draw the characters, write about their traits, and their thoughts or feelings about them.

### Nature + Survival Study (10 pages):

Allocate approx 10 pages (5 sheets) for recording findings from your nature walks and studies. This will be where children draw and write what they see and do in nature and how it connects to Roz's time in the wilderness.

#### Vocabulary Words (10 pages):

Reserve 10 pages for vocabulary development.

New and interesting words found in the book can be written down, along with its definition and a sentence using the word.

REMEMBER: Every child is a writer. They may not yet be writing <u>words</u>, but they might be writing letters, sounds, pictures, signs, or other. That means that children who are not yet writing full sentences can be writing letters and sounds that start a word, they can draw pictures and shapes and can present their response aloud at the end of the session allowing you to take notes in their journal of their verbal response.

### Benefits of Using a Sketchbook:

Provides a structured yet flexible way for children to express their learning.

Encourages creativity and a deeper engagement with the book. Creates a memorable keepsake of their learning journey.

We encourage you to periodically review your child's sketchbook. This not only helps you track their progress but also provides an opportunity to discuss their insights and creativity. It's a wonderful way to connect with your child over their learning experience.

Be sure to display their work after the study!

#### **Alternatives**

If you choose not to use a main lesson sketchbook, our recommendation is to use a simple binder or folder to collect work.

Lined paper can be used for Writers workshop, Vocab Ventures and Natural Journaling.

Watercolor paper is best for charcoal drawings, watercolor paintings and thick markers.

Printer paper is just fine for Character Studies and character portraits.

Printed Planning Sheets (provided in Printables pdf) are great for the STEM Challenges

### The Schedule: A Personalized Pace for the Study

The beauty of homeschooling lies in its flexibility and the ability to tailor learning to fit your family's schedule and pace. While we will provide a structured guide and recommended order of activities aligned with the events in the book, please feel free to adapt this to suit your family's rhythm. Whether you choose to immerse yourselves in longer, in-depth sessions or prefer shorter, more frequent engagements with the book and its activities, the key is to make this journey enjoyable and enriching for your family. We hope this study offers both a meaningful literary experience and the flexibility to integrate seamlessly into your homeschool routine.

### **Chapter Breakdown**

Below you will find a list of all (mini) chapters and the corresponding activities. You will quickly discover that the chapters in The Wild Robot truly are mini, many being only one page. Due to this fact, you can absolutely complete the suggested activities <u>slightly later</u> than the recommended chapter, <u>but not before</u>.

For example, you might choose to read Chapters 1-8 and then pause to do the activities that coincide with the chapters you just read before moving on in reading.

#### **Beyond the Book**

The final section "Beyond the Book" is not included in the schedule. This section includes possible extension learning opportunities, possible field trip ideas, supporting book recommendations and more.

# The Schedule: Activities by Chapter

Chapter 1: The Ocean	
Chapter 2: The Otters	
Chapter 3: The Robot	
Chapter 4: The Robot Hatches	
Character Studies: Roz The Robot (refer to Character Studies)	
STEM Project Building a Model Roz (refer to STEM section)	
Debate Questions: what criteria should be used to define something as alive? Does Roz, as a robot,	
meet these criteria? (refer to Integrating Debate)	
Chapter 5: The Robot Gravesite	
Chapter 6: The Climb	
Chapter 7: The Wilderness	
Writers Workshop: Check the list of journal prompts and ways to include them in this study.	
Chapter 8: The Pinecones	
Vocab Ventures	
Integrating Debate: "Fact, Opinion, or Robot" Workshop (refer to lesson plan)	
Chapter 9: The Mountain	
Chapter 10: The Reminder	
Chapter 11: The Robot Sleeps	
Exploring Robotics: Living Room Programming Challenge	
Chapter 12: The Storm	
Chapter 13: The Aftermath	
Chapter 14: The Bears	
Chapter 15: The Escape	
Vocab Ventures	
Writers Workshop: If you haven't recently looked at the journal prompts, be sure to check the list ar	ıd
choose the one(s) best for your family.	
Chapter 16: The Pine Tree	
Culinary Adventures: Homemade Mud Puddle Chocolate Pudding (refer to recipe)	
Chapter 17: The Camouflaged Insect	
Chapter 18: The Camouflaged Robot	
STEM Project: Camouflage your Model Roz (refer to lesson plan)	
Nature Study: it is also a great time to head out on a nature walk and see how well children can do	
camouflaging themselves	
Survival Skills: Earn your Camouflage Badge	

**Chapter 19: The Observations Chapter 20: The Language of the Animals** \_\_\_\_ Nature Study: Much like Roz was able to do, find a quiet place to stand or sit and observe. What do you see? Hear? Smell? Feel? Have children document their findings in their journals. Survival Skills: Earn your Observation Badge **Chapter 21: The Introduction Chapter 22: The New Word** Chapter 23: The Wounded Fox \_\_\_ Writers Workshop: If you haven't recently looked at the journal prompts, be sure to check the list and choose the one(s) best for your family. **Chapter 24: The Accident** Chapter 25: The Egg Vocab Ventures \_\_\_ Integrating Debate: If you haven't yet integrated additional debate questions, be sure to check the list and choose the one(s) best for your family. **Chapter 26: The Performer Chapter 27: The Gosling** \_\_ Character Studies: Brightbill Chapter 28: The Old Goose \_\_\_ Character Studies: Mr. Loudwing Survival Skills: Earn your Foraging Badge **Chapter 29: The Beavers** Character Studies: Mr.Beaver Chapter 30: The Nest \_\_\_ Culinary Adventures: Nut Butter and Oatmeal Energy Balls (refer to recipe) \_\_\_ STEM Challenge: Build Roz a Lodge (refer to lesson plan) \_\_\_ Nature Study: Head out on a nature walk and look for a wide variety of animal homes, may that be nests, dens, lodges or other. If space and natural resources allow, challenge your child to find (or build) the best suitable home for them in the woods. Where would they choose to set up camp if they had to sleep in the woods for one night? \_\_\_ Survival Studies: Earn your Shelter Badge Chapter 31: The First Night Chapter 32: The Deer Chapter 33: The Garden **Chapter 34:The Mother** \_\_\_ Integrating Debate: revisit the question: what criteria should be used to define something as alive? Does Roz, as a robot, meet these criteria?

Copyright 2024 Creature Curriculum 12

\_\_\_ Culinary Adventures: Vegetable Stew

Writers Workshop: If you haven't recently looked at the journal prompts, be sure to check the list an
choose the one(s) best for your family.
Chapter 35: The First Swim
STEM Challenges: Experimenting with Waterproof Feathers
Chapter 36: The Gosling Grows
Chapter 37: The Squirrel
Character Studies: ChitChat the Squirrel
Vocab Ventures
Chapter 38: The New Friendship
Chapter 39: The First Flight
Chapter 40: The Ship
Integrating Debate: If you haven't yet integrated additional debate questions, be sure to check the list
and choose the one(s) best for your family.
Chapter 41: The Summer
Chapter 42: The Strange Family
Integrating Debate: revisit the question: what criteria should be used to define something as alive?
Does Roz, as a robot, meet these criteria?
Chapter 43: The Gosling Takes Off
Chapter 44: The Runaway
Chapter 45: The Dead Robots
$\underline{\hspace{0.5cm}} Writers Workshop: If you haven't recently looked at the journal prompts, be sure to check the list and the prompts of the pro$
choose the one(s) best for your family.
Chapter 46: The Fight
Character Study: The Bears (all of select one)
Chapter 47: The Parade
Chapter 48: The New Foot
STEM Challenge Create a Prosthetic for Roz (refer to project guide)
Survival Studies: Earn your First Aid Badge
Chapter 49: The Flier
Chapter 50: The Button
Chapter 51: The Autumn
Chapter 52: The Flock
Exploring Robotics: Integrating Blockly Games
Chapter 53: The Migration
Nature Study: no matter the time of year, this is a wonderful time for a discussion about migratory
birds in your region. What are they? Where are they now? Head out on a nature walk. Do you see
migratory animals this time of year?
Vocab Ventures

**Chapter 54: The Winter** Chapter 55: The Lodgers **Chapter 56: The New Lodges** Chapter 57: The Fire \_\_\_ Survival Studies: Earn your Fire Safety Badge Writers Workshop: If you haven't recently looked at the journal prompts, be sure to check the list and choose the one(s) best for your family. **Chapter 58: The Conversations Chapter 59: The Spring Chapter 60: The Fish** \_\_\_ Survival Skills: Earn your Water Badge **Chapter 61: The Robot Stories Chapter 62: The Return** \_\_\_ STEM Challenges: Flying V Formation \_\_ STEM Challenges: Building and testing paper gliders Chapter 63: The Journey Nature Studies: Depending on your season, this is a great time to visit a local greenhouse! Or make your own simple DIY Greenhouse near a sunny window using a bean, wet paper towel and ziplock bag. \_\_\_ Survival Skills: Navigation Badge **Chapter 64: The Special Robot Chapter 65: The Invitation Chapter 66: The Celebration** Culinary Adventures: Forest Berry Island Smoothie **Chapter 67: The Sunrise Chapter 68: The Recos** \_\_ Vocab Ventures \_\_\_ Integrating Debate: If you haven't yet integrated additional debate questions, be sure to check the list and choose the one(s) best for your family. **Chapter 69: The Defective Robot Chapter 70: The Hunt Begins Chapter 71: The Forest Assault** \_\_\_ Writers Workshop: If you haven't recently looked at the journal prompts, be sure to check the list and choose the one(s) best for your family. **Chapter 72: The Mountain Rumble** Chapter 73: The Chase Chapter 74: The Click Chapter 75: The Last Riffle

Copyright 2024 Creature Curriculum 14

**Chapter 76: The Broken Robot** 

STEM Challenges: Designing Roz 2.0
Chapter 77: The Meeting
Chapter 78: The Farewell
Exploring Robotics: Robotic Animals for Study and Surveillance
Integrating Debate: If you haven't yet integrated additional debate questions, be sure to check the list
and choose the one(s) best for your family.
Chapter 79: The Departure
Chapter 80: The Sky
Writers Workshop: If you haven't recently looked at the journal prompts, be sure to check the list and
choose the one(s) best for your family.
Vocab Ventures
Culinary Adventures: Island Fish Tacos (refer to recipe)

# STEM Challenges in "The Wild Robot" Unit Study

Welcome to the "STEM Challenges" section of our "The Wild Robot" unit study. This segment is specially designed to complement the adventures of Roz, the robot protagonist, by immersing your child in a series of stimulating Science, Technology, Engineering, and Mathematics (STEM) activities.

### **Connecting to the Themes**

In "The Wild Robot," Roz's journey is filled with instances that beautifully illustrate STEM principles in action – from her adaptive strategies to survive on the island to the various natural phenomena she encounters. Our STEM Challenges will tap into these elements, providing your child with an opportunity to delve deeper into the scientific and technological themes presented in the story.

### **Problem Solving**

Through a range of engaging activities, we aim to spark curiosity and foster a deeper understanding of STEM concepts. These challenges will include fun experiments, building projects, and problem-solving exercises that are directly inspired by scenarios from "The Wild Robot." Whether it's exploring principles of aerodynamics, understanding ecosystems, or engaging in robotics and programming exercises, each activity is designed to be both educational and captivating.

#### **Innovators Big and Small**

Our goal with these STEM Challenges is to not just teach your child about science and technology but to encourage them to think like innovators and problem solvers. We believe that by connecting these activities to the story of Roz, we can make STEM learning more relatable and exciting. This approach not only enhances their comprehension of the book but also equips them with critical skills and knowledge that are essential in today's technology-driven world.

### **Added Dimension - Personal Growth Alongside Roz:**

As a part of this study, children will craft a model of Roz the robot, and, as Roz is faced with challenges and changes, their model will be asked to do the same. We recognize that some children might feel hesitant to alter or 'damage' their carefully crafted Roz models. It's important to note that, just like Roz, they too are going through a journey of change and growth. By adapting their models, they learn about resilience and the beauty of transformation, even when it involves challenges. This is a valuable life lesson about adapting to change and emerging stronger, a central theme in Roz's story.

### STEM Challenge: Build a Model Roz

**Objective:** To enhance the children's engagement with "The Wild Robot," each child will create a model of Roz, the robot protagonist, using various craft materials. This activity aims to deepen their understanding of the narrative, encourage creativity, and foster a hands-on learning experience, while also emphasizing the personal growth and resilience mirrored in the story. Depending on the age(s) of your child(ren), decide how many STEAM parameters you would like to set for their build (STEAM parameters to follow).

### Materials Needed (an assortment of the following)

Main Lesson Sketchbook and/or STEM Planning Sheet (provided in Printables download)

Cardboard, Recycling or Scrap wood

Colored paper, foil

Paint, Glitter and brushes

Markers or crayons

Scissors, Glue and tape

Fabric scraps

Natural materials (leaves, moss, twigs, etc.)

Miscellaneous craft supplies (beads, buttons, yarn, etc.)

[Optional] LED lights or glow-in-the-dark paint

Note: I encourage the use of recycled materials and creativity in finding and using supplies. Let their imagination get to work; just like the resourcefulness that was needed by the characters in the story!

### **Procedure:**

1. Introduction: Discuss the character of Roz in "The Wild Robot," focusing on her physical characteristics and capabilities. Show some reference images of Roz to give children a visual idea.

Set the parameters and restrictions for this STEM challenge. We often recommend that Roz be no taller than 12 inches and no wider than 6 inches to better allow for the remainder of the STEM challenges. A full list of possible constraints are provided.

2. Construction and Artistic Challenges: The model must be able to stand on its own. For older kids: must include at least one movable part. Incorporate artistic elements like color schemes, textures, or patterns that reflect Roz's character or environment.

3. Design Requirements: The model should resemble Roz and demonstrate a balance of technical accuracy and artistic interpretation. Encourage individual artistic flair while maintaining recognizable features of

Roz.

4, Design Phase: Encourage children to sketch their design for the model Roz on paper before starting to

build. Discuss the importance of planning and designing in any construction project.

5. Building the Model: Using the materials provided, children start constructing their model Roz based on

their designs. Guide them to use various materials to represent different parts of Roz, such as pipe

cleaners for arms or buttons for eyes.

6. Customization and Creativity: Allow children to personalize their models, encouraging them to be as

creative as they wish. They can add color, texture, and other unique features to their model.

7. Reflection and Journaling: Children reflect on the building process and document their experience and

final design in their Main Lesson Book. Encourage them to think about what they learned and how they

solved any challenges they encountered.

**Learning Outcomes:** 

Understanding basic construction and design principles.

Enhancing creativity and problem-solving skills.

Developing an appreciation for the character of Roz and her design.

Possible Limitations/Restraints/Requirements:

Depending on your child's age and level, you can introduce the following constraints to tailor the difficulty of the project. These constraints can help in making the activity more challenging and interesting,

encouraging children to think creatively and develop their problem-solving skills.

**Time Limit:** Set a specific time frame for completing the model.

**Material Restrictions:** Limit the types of materials they can use (e.g., only cardboard and markers).

**Size Requirements:** Specify dimensions for the model Roz.

Functionality Challenge: Add a requirement that some part of Roz must move (e.g., arms or head).

**Color Limitation:** Restrict the color palette they can use for decoration.

**Recycled Materials Only:** Use only recycled materials to build the model.

### STEM Challenge: Camouflaging Your Model Roz

**Objective**: To teach children about camouflage and adaptation by camouflaging their model Roz to blend into different environments, inspired by a scene from "The Wild Robot" where Roz uses camouflage to go unnoticed.

#### **Materials:**

Model Roz (built by the children)

Main Lesson Sketchbook and/or STEM Planning Sheet (provided in Printables download)

Variety of craft materials (paints, fabric, yarn, etc.)

Natural materials (leaves, twigs, grass, etc.)

Three premade backdrops (provided for printing)

Glue and scissors

A workspace cover for messier materials

#### **Instructions:**

- 1. Choose a Backdrop: Begin by having the children select one of the 3e pre-made backdrops. Each backdrop is made of 4 sheets that need to be cut and taped together.
- 2. Study the Environment: Encourage the children to closely observe the colors, textures, and patterns in their chosen backdrop. Discuss how animals and insects use camouflage in these environments.
- 3. Plan Your Camouflage: Have the children brainstorm ideas on how they can modify their model Roz to blend into the backdrop. Encourage them to think about the colors, shapes, and materials they will use.
- 4. Gather Materials: Based on their plan, let the children collect the craft and natural materials they need for their camouflage.
- 5. Camouflage Roz: Children will now start camouflaging their model Roz. They can glue on fabric, paint different patterns, or attach natural materials to mimic the environment in the backdrop. Remind them that the goal is to make Roz blend in as much as possible with the background.
- 6. Share and Discuss: Once everyone is done, have a sharing session. Each child can present their camouflaged Roz and explain how they chose to camouflage it. Discuss how their camouflage techniques would help Roz stay hidden in that particular environment.

7. Reflection: Ask the children to reflect on what they learned about camouflage and adaptation. How does this activity relate to Roz's experiences in the book?

### **Tips for Parents:**

- 1. Encourage creativity there is no single right way to camouflage Roz.
- 2. Use this activity to talk about the importance of blending in with the environment for survival in the wild.
- 3. This activity not only reinforces a key survival technique from "The Wild Robot" but also encourages creativity and a deeper understanding of how creatures, including robots, can adapt to their surroundings.

### STEM Challenge: Prosthetic Engineering

**Objective**: To engage children in a hands-on STEM challenge by creating a prosthetic leg for their model Roz, mirroring her experience in "The Wild Robot" and teaching them about weight distribution, balance, and resourcefulness.

#### **Materials:**

Main Lesson Sketchbook and/or STEM Planning Sheet (provided in Printables download) Model Roz (previously built by the children)

Assortment of materials not used in the original design (e.g., craft sticks, cardboard, rubber bands, straws, bottle caps, etc.)

Glue, tape, scissors

Measuring tools (ruler, measuring tape)

Weights (to test balance, like small pebbles or coins)

#### Procedure:

- 1. Introduction to the Challenge: Discuss the part in "The Wild Robot" where Roz loses a foot and how the animals help her create a new one. Emphasize the themes of adaptability and problem-solving.
- 2. Preparation: Carefully have the children remove one leg from their Roz model. Explain that this mirrors Roz's experience and is an important part of the learning process.
- 3. Planning the Prosthetic: Encourage children to brainstorm and sketch ideas for a prosthetic leg using only the materials not used in the original design. Discuss concepts like balance and weight distribution that will be crucial for the prosthetic to work.
- 4. Building the Prosthetic: Children use their selected materials to build the prosthetic leg for their Roz model. Encourage them to measure and cut materials as needed, and to constantly test the balance and stability of their design.
- 5. Testing and Adjusting: Once the prosthetic is attached, test whether the Roz model can stand up. Children may need to adjust their designs for better stability, which teaches them about trial and error in engineering.
- 6. Discussion and Reflection: Have a discussion about the challenges faced and how they overcame them. Encourage children to share their designs and the thought process behind them. Reflect on how this activity relates to Roz's journey in the book and the importance of resilience and creativity.

7. Journaling: Ask the children to document the process, challenges, and solutions in their Main Lesson Sketchbooks. They can also draw or write about how they felt during the activity and what they learned about balance and resourcefulness.

### **Learning Outcomes**

Understanding of basic principles of design and engineering. Enhanced problem-solving and critical thinking skills. Practical experience in building and adapting to challenges.

STEM Challenge: Build a Shelter for Roz

**Objective:** To engage children in a hands-on STEM activity by building a shelter for their model Roz, inspired by the part in "The Wild Robot" where the beavers make a home for Roz and Brightbill. This activity will challenge children to think creatively and apply practical engineering skills.

#### **Materials**

Main Lesson Sketchbook and/or STEM Planning Sheet (provided in Printables download) Model Roz (previously built by the children)

A variety of building materials (e.g., sticks, leaves, cardboard, fabric, straws, stones, clay, etc) Natural materials (if conducted outdoors)

Scissors, tape, glue

Ruler or measuring tape

#### **Procedure**

- 1. Introduction to the Challenge: Discuss the part in "The Wild Robot" where the beavers build a home for Roz and Brightbill. Emphasize themes of resourcefulness and adaptation to the environment.
- 2. Setting the Requirements: Lay out the challenge requirements: the shelter must be large enough to fit the Roz model, it should be sturdy, and it should protect Roz from 'weather' (simulated with a light spray of water or a fan, if available or desired).

Introduce constraints to challenge the kids, like a time limit or using limited materials. Possible constraints listed below.

- 3. Planning and Designing: Use the Planning sheet provided in the printables PDF, or work right in the Main Lesson Book.nEncourage children to sketch their shelter designs before building. They should consider the size, materials, and location (if building outdoors).
- 4. Building the Shelter: Children use their selected materials to construct the shelter. Monitor their progress, offering guidance on stability and material choices.
- 5. Testing the Shelter: Test the shelters for stability and 'weather' resistance. Allow children to make adjustments and improvements based on the test results.
- 6. Discussion and Reflection: Discuss the challenges faced during the building process and how they solved them. Ask children to explain their design choices and how they ensured their shelter met the requirements. Reflect on how this activity relates to the challenges Roz faced in the story.

7. Journaling: Have children document the building process, challenges, and solutions in their Main Lesson Sketch Books. Encourage them to draw their final shelter design and write about what they learned from the activity.

#### \*Challenge Constraints\*

Adding constraints to the shelter-building challenge can make the activity more engaging and encourage creative problem-solving. Here are some possible constraints you could provide. Select those that are relevant to your child's age, interests and/or educational journey.

**Time Limit:** Set a specific time frame in which the shelter must be completed, such as 30 minutes or an hour. This encourages quick thinking and decision-making.

**Limited Materials:** Provide a restricted set of materials for building the shelter. For example, each child or group can only use a certain number of sticks, a piece of cardboard, and a limited amount of tape or glue. This forces children to think creatively about how to use these resources effectively.

**Size Specifications:** Require that the shelter fits within a certain size range or has specific dimensions. This adds an element of precision and planning to the task.

**Environmental Challenges:** Simulate weather conditions that the shelter must withstand, like a light spray of water for rain, a fan for wind, or a weight to mimic snow.

**Design Requirements:** Specify certain design elements that must be included, such as a roof, an entryway, or a window. This encourages children to think about functionality as well as structure.

**Weight Restrictions:** If using a balance or scale, set a limit on how heavy the shelter can be, which encourages the use of lightweight yet sturdy materials.

**Single-Use Material:** Challenge the children to build the shelter using only one type of material (e.g., only sticks or only cardboard). This tests their ability to be innovative with a limited resource.

**No-Cut Rule:** Remove access to the use of scissors, forcing children to think about how they can utilize materials in their original form.

**Non-Adhesive Construction:** Do not allow the use of adhesives like glue or tape, challenging kids to think about how materials can be interlocked, balanced, or supported without being physically bound together.

### STEM Challenges: Experimenting with Waterproof Feathers

**Objective:** To encourage children to discover how birds like penguins, ducks, and geese stay dry in the water. Through experimentation, they will investigate how different materials can make a paper feather waterproof, linking to Brightbill's experiences in "The Wild Robot."

#### **Materials:**

Paper feather (template provided in printables pdf)

Crayons

Vegetable oil

Petroleum jelly

**Paintbrushes** 

Spray bottle with water

Mural materials (for extension activity)

#### **Procedure:**

- 1. Introduction: Discuss Brightbill's first swim in "The Wild Robot" and introduce the concept of waterproof feathers in birds.
- 2. Present the challenge: can they make a paper feather waterproof using the materials provided?
- 3. Hypothesis and Planning: Ask children to hypothesize which materials (crayons, vegetable oil, petroleum jelly) might make the feather waterproof and why. Encourage them to plan how they will apply their chosen material to the paper feather.
- 4. Experimentation: Children apply their chosen material to the paper feather, experimenting with different methods of application. They then test their feather's waterproofing by spraying it with water from the spray bottle. Encourage them to try different approaches if their first attempt doesn't work as expected.
- 5. Observation and Discussion: Invite children to share their findings. Which materials were effective at waterproofing the feather? Are there other materials they would like to test? Do that too. Lead a discussion about why some materials might have worked better than others.
- 6. Connecting to Real Birds: Explain how birds use oil from their preen gland to waterproof their feathers, relating it back to the children's experiment results. Discuss the importance of this feature for birds' survival and how it relates to what they observed in their experiments.
- 7. Reflection and Journaling: Children document their experiment, observations, and conclusions in their

Main Lesson Book. Encourage them to reflect on the process of scientific inquiry and experimentation.

#### Extension Activity - Weather-Resistant Mural:

Using their newfound knowledge, children can create an outdoor mural designed to withstand weather, applying waterproofing techniques they've learned. This could be done on a scrap piece of wood, a canvas or simply some thick paper. Be sure to secure the mural if it's not heavy enough to stay put. Have the children make a piece of art and waterproof it.

Plan to observe the mural after a few days to see how it holds up against the elements.

### **Learning Outcomes:**

Develop a hands-on understanding of how waterproofing works in nature.

Practice scientific inquiry through experimentation and observation.

Apply learning in a creative, real-world context with the mural activity.

Birds waterproof their feathers using a natural process that involves preening and the application of oils. Here's how it works. Most birds have a special gland located near the base of their tail, called the uropygial gland or preen gland. This gland secretes an oily substance.

Birds use their beaks to spread this oil over their feathers. During preening, a bird will typically start by nibbling at the base of their feathers and then move along the feather shaft to the tip, effectively coating the feather with oil. The oil from the uropygial gland has waterproofing properties. When applied to feathers, it helps to create a barrier that prevents water from penetrating through to the bird's skin. This is essential for birds, especially those that live in aquatic environments or are frequently exposed to water, as it keeps them dry and maintains their ability to regulate body temperature.

Besides waterproofing, this oil also keeps feathers flexible and in good condition. Without regular preening and oil application, feathers can become brittle and lose their effectiveness for flight and insulation. The structure of feathers also plays a role in waterproofing. Feathers overlap in a way that helps to shed water, and their structure can trap air, providing additional insulation.

This process of waterproofing is vital for birds' survival, helping them to stay warm, buoyant, and able to fly effectively.

### STEM Challenges: Flying V Formation

Objective: To teach children about air resistance and how air flows around objects, using a simple paper strip activity. This experiment will visually demonstrate a basic concept of aerodynamics, similar to understanding how air flows around birds in a flying V formation.

(ages >7 with extension activity for older children)

#### **Materials:**

A sheet of standard printer paper (8.5" x 11")

Scissors

A fan (or you can do this outside on a windy day)

#### **Procedure:**

- 1. Preparation: Cut a 4" wide strip from the longer side of a piece of paper, so it measures approximately 4" x 11". Explain to your child that they will be observing how air affects the paper.
- 2. Predictions: Before starting the experiment, ask your child what they think will happen to the paper when they hold it in front of a fan or in the wind. Discuss their predictions and write them down for later comparison.
- 3. Conducting the Experiment: Turn on the fan and set it to a moderate speed (or find a place outside where the wind is noticeable but not too strong). Instruct your child to hold the center of the paper strip at the bottom with their thumb, leaving the rest of the paper free to move. Have them slowly approach the fan with the paper until they see the paper fold upwards, forming an inverted V shape.
- 4. Observation and Discussion: Ask your child to describe what happens to the paper and why they think it behaves that way. Explain that the air from the fan (or wind) applies force to the paper, and due to air resistance, the paper folds upwards. This demonstrates how air flows around objects and can cause them to move.

Relate this concept back to the flying V formation in birds, explaining how air resistance plays a role in why birds fly in that specific pattern for efficiency.

5. Further Exploration: Experiment with different sizes of paper strips or different speeds of the fan to observe any changes in the paper's behavior. Discuss how these changes might relate to different sizes of birds or different flying speeds.

6. Journal Entry: Encourage your child to write or draw about the experiment in their Main Lesson Book. They can include their initial predictions, what they observed, and what they learned about air resistance and aerodynamics.

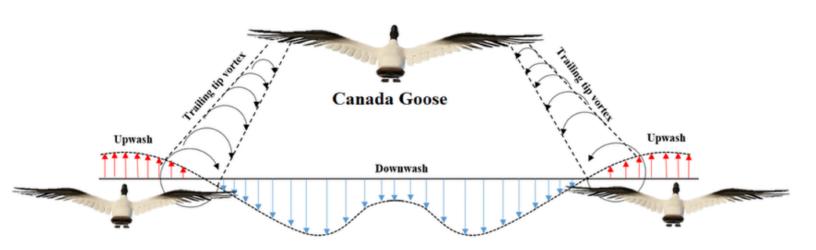
### **Learning Outcomes:**

Basic understanding of air resistance and aerodynamics.

Development of observational and critical thinking skills.

Relating scientific concepts to real-world phenomena, such as bird flight.

Why don't birds fly in a straight line? As a bird flaps, a rotating vortex of air rolls off each of its wingtips. These vortices mean that the air immediately behind the bird gets constantly pushed downwards (downwash), and the air behind it and off to the sides gets pushed upwards (upwash). (See image.) If another bird flies in either of these upwash zones, it gets free lift. It can save energy by mooching off the air flow created by its flock-mate.



### STEM Challenges: Building and Testing Paper Gliders

**Objective:** To teach older children about aerodynamics and air resistance by designing, building, and testing paper gliders. This activity combines creativity with scientific experimentation and relates to the principles of flight, as seen with the birds in "The Wild Robot."

#### **Materials:**

Different types of paper (printer paper, cardstock, newspaper)

Scissors

Ruler

Paper clips (for adding weight)

Stopwatch (optional, for timing flights)

Tape measure (for measuring distance)

#### **Procedure:**

1. Research and Design: Begin with a brief lesson on aerodynamics, focusing on how shape and weight affect how objects move through the air.

Encourage children to research different paper airplane or glider designs. There are many templates and design ideas available online.

- 2. Building Gliders: Using their chosen designs, children create paper gliders. Encourage experimentation with different types of paper and glider shapes. They can modify their gliders by adding paper clips for weight or adjusting wings.
- 3. Testing and Observing: Have children test their gliders, ideally in a large open space or outside. They can conduct experiments to see how far or how long their gliders can fly, using a stopwatch and tape measure.
- 4. Data Collection and Analysis: Encourage children to collect data on their glider's performance, such as distance flown, time in the air, and stability. Discuss what design features seemed to work best and why, relating this back to the concepts of air resistance and aerodynamics.
- 5. Journaling and Reflection: Children document their designs, experiments, and findings in their Main Lesson Books. Encourage them to reflect on how their experiments relate to the principles of flight observed in nature, as with the birds in "The Wild Robot."

## Extension Activity:

For an added challenge, propose specific goals, like designing a glider that can fly the farthest or stay airborne the longest, and have a friendly competition.

# **Learning Outcomes:**

Understanding the principles of aerodynamics and air resistance.

Developing skills in scientific experimentation and data analysis.

Enhancing creativity and problem-solving abilities.

### STEM Challenges: Designing Roz 2.0

**Objective:** To engage children in a creative and thought-provoking exercise by envisioning and designing a new version of Roz (Roz 2.0), considering the challenges she faced at the end of "The Wild Robot."

#### **Materials:**

Main Lesson Sketchbook and pencils
Craft materials (e.g., cardboard, pipe cleaners, bottle caps, foil, etc.)
Coloring materials (markers, crayons, colored pencils)
Glue, tape, and scissors
Images and descriptions of Roz from "The Wild Robot" for reference

#### **Procedure:**

- 1. Introduction: Begin with a discussion about the end of "The Wild Robot," where Roz is broken and taken away by the RECOs. Introduce the concept of Roz 2.0 how might she be redesigned to overcome the challenges she faced?
- 2. Brainstorming Session: Encourage children to brainstorm ideas for Roz 2.0. Ask them to consider:

What improvements or additional features would Roz need?

How could these changes help her adapt better to island life or other environments?

What materials would make Roz 2.0 stronger or more adaptable?

Children sketch their initial ideas, focusing on specific modifications and enhancements.

- 3. Designing Roz 2.0: Using their sketches as a blueprint, children begin creating a model of Roz 2.0 using the craft materials. Prompt them to be innovative, using different materials to depict the new features they have envisioned for Roz.
- 4. Presentation and Discussion: Have your child present their Roz 2.0 design to the family. Encourage them to explain their design choices, focusing on how each modification or new feature would help Roz in her adventures.
- 5. Reflection: Discuss how reimagining Roz requires both creativity and an understanding of her challenges. Reflect on how this activity relates to themes of resilience and adaptation found in "The Wild Robot."

### Extension Activity:

Option 1 - Modify Existing Model: If the children are open to it, they can take their original Model Roz and modify it. This could involve adding new features, enhancing its capabilities, or even restructuring it. The process symbolizes Roz's evolution and resilience in the face of challenges.

Option 2 - Create a New Model: Alternatively, children can create Roz 2.0 from scratch using new materials. This approach allows them to keep their original model intact while still exploring the concept of adaptation and improvement.

### **Learning Outcomes:**

Development of creative design and problem-solving skills. Enhanced understanding of robotics and adaptation. Ability to articulate ideas and present creative solutions.

# Exploring Robotics in "The Wild Robot" Unit Study

Welcome to the "Exploring Robotics" section of our "The Wild Robot" unit study, where the fascinating world of robotics comes alive for your child. Inspired by the journey of Roz, the robot protagonist in "The Wild Robot," this part of our study delves into the intriguing realm of robotics, aligning with the adventures and challenges faced by Roz.

#### **Basic Concepts of Robotics**

In "The Wild Robot," Roz's experiences as a robot in a natural environment offer a unique perspective on the interaction between technology and nature. This narrative provides an engaging backdrop for our exploration of robotics, allowing children to draw connections between the story and real-world applications of robotic technology. Through a series of carefully designed activities, we aim to introduce basic concepts of robotics and programming, inspired by Roz's abilities and decision-making processes in the book. We'll touch upon the practical and theoretical aspects of robotics, fostering a deeper understanding and appreciation of this rapidly evolving field.

#### **Ethical Implications**

Our exploration goes beyond just understanding how robots work; it connects to the Integrating Debate Questions and delves into the ethical implications of robotics and artificial intelligence, mirroring the complexities Roz faces in her interactions with the natural world. The activities in this section are designed to be thought-provoking and hands-on, ensuring that children not only learn about robotics but also develop critical thinking and problem-solving skills.

#### **Connections to the Literature**

As your children engage with these activities, they will see parallels between Roz's story and the principles of robotics they learn, enhancing their connection to the book while gaining valuable insights into the world of robotics. This section aims to ignite a curiosity and passion for technology and robotics in young minds, setting the foundation for a lifelong interest in these fields.

# Exploring Robotics: Living Room Programming Challenge

**Objective:** To understand basic programming concepts, learn about giving precise instructions, and improve problem-solving skills.

#### **Materials Needed**

Paper and pens/markers

Measuring tape (optional, for accuracy)

Obstacles (like cushions, chairs, or toys to serve as obstacles in the living room)

### **Activity Steps**

- 1. Introduction: Begin with a brief discussion on what programming is and how it relates to giving instructions. Explain the concept of 'coding' a person, comparing it to how a robot (like Roz) might be programmed.
- 2. Setup: Arrange the living room with obstacles to create a maze-like environment. Designate a start point and an end point.
- 3. Programming Basics: Teach the basic 'commands': forward (step), backward, turn right, turn left. Discuss the importance of specifying the number of steps and turns. Optionally, introduce more complex commands like loops or conditions for older children (more below).
- 4. Coding Phase: Divide the family into pairs: one 'programmer' and one 'robot'. The programmer writes a set of instructions (code) to navigate the robot from the start point to the end point without bumping into obstacles.
- 5. Execution and Debugging: The 'robot' follows the written instructions exactly as given. If the robot doesn't reach the desired point or hits an obstacle, the programmer must 'debug' and adjust their code.
- 6. Reflection and Discussion: Discuss what worked and what didn't. Emphasize the importance of clear and precise instructions. Relate the activity back to the book, discussing how Roz might have to follow and interpret instructions.
- **7.** Role Reversal: Switch roles and repeat the activity to give each participant a chance to be both programmer and robot.

### Extension Activity:

1. For older students, introduce more complex programming concepts like conditional statements (if-then logic) or introduce a 'bug' in the code intentionally for the robot to identify and correct.

examples of conditional statements that could be used:

"If you encounter a chair, then turn right and take three steps forward."

"If there is an obstacle directly in front, then take a step backward before turning left."

"If you reach a marked spot on the floor, then stop and clap before proceeding."

8. Reflection and Advanced Discussion: Discuss how conditional statements added complexity and flexibility to the instructions. Relate this to real-world programming scenarios or how a robot like Roz might use similar decision-making processes.

### **Learning Outcomes:**

Students will learn the basics of coding, including writing clear instructions and problem-solving when things don't go as planned.

They will understand the importance of precision in programming.

The activity fosters teamwork, communication, and empathy by experiencing both the role of giving instructions and following them.

### **Exploring Robotics: Integrating Blockly Games**

**Objective:** To enhance children's understanding of basic programming concepts using Blockly Games in parallel with the reading of "The Wild Robot."

(online suggestion :Ages 7+)

#### **Materials:**

Internet-enabled computer or tablet
Access to Blockly Games website (https://blockly.games/)

### What is Blockly?

Blockly is a free online platform that teaches programming using a simple, block-based approach. It's designed especially for children, making it an excellent tool for beginners in coding.

Blockly uses colorful blocks that represent coding commands. These blocks can be dragged and dropped to create sequences of code.

### How Blockly Relates to "The Wild Robot":

Blockly's approach to coding is akin to how a robot, like Roz in our story, might process and execute tasks. It helps children understand the logic behind how robots function and make decisions, offering a real-world connection to the story.

### How To Use Blockly?

Getting Started: Log on to the Blockly website. Start with either of the simple games, "Puzzle" or "Maze." These games require them to use coding blocks to solve problems or navigate challenges. Each time you add a code block you can 'Run Program' to see what you have coded. Based on your success or lack thereof, make necessary adjustments!

Involvement: We highly encourage you to engage with your child in these Blockly activities. It's a wonderful opportunity to bond and learn together. No prior coding experience is needed, and you might find it as enjoyable and informative as your child does! Just try to take turns:)

Exploring Robotics: Animals for Study and Surveillance

Objective: Children will understand the use of robotic animals in scientific study and surveillance, and

how these devices can help in conservation efforts and wildlife research.

**Overview for Parents:** 

Some conservation efforts use robotic animals to blend into the wild and study animal behavior with

minimal disruption. For example, robotic birds or fish used for ecological studies, which can be seen as a

real-life parallel to Roz's attempts to integrate into and interact with the animal community.

**Materials:** 

Computer for presentations

Internet access for research

Main Lesson Sketchbook

Optional: Basic craft materials (cardboard, paint, glue, etc.) for model making

Optional: Basic robotics kits or materials (if available)

**Lesson Introduction** 

Introduce the concept of robotic animals, explaining how they are used in wildlife study and conservation

efforts.

**Activity 1: Case Study Exploration:** 

1. Case Study Example: RoboFish, used in marine biology studies.

2. Discuss how RoboFish are used to blend in with aquatic life, monitor marine ecosystems, and even

study fish behavior in a less intrusive way.

3. Show a video or presentation about RoboFish and their use.

https://www.voutube.com/watch?v=8Tf V-boScw&t=48s

**Activity 2: Group Discussion:** 

1. Discuss why scientists might use robotic animals instead of observing real animals directly.

2. Topics to consider: Safety, accuracy of data, impact on the animals and environment, and the

technology behind these robots.

## Activity 3: Design Your Own Robotic Animal:

- 1. Kids will sketch their ideas for a robotic animal that could be used for a specific scientific purpose.
- 2. Encourage creativity but also emphasize the need for realism in how the robot could blend into its environment and serve a useful purpose.

## Activity 4: Model Building:

- 1. If time and materials allow, kids can build a simple model of their robotic animal design using craft materials.
- 2. For classes with access to basic robotics kits, students can attempt to create a simple moving part or feature.

## Conclusion and Reflection:

- 1. Have your child share their design and explain the purpose and function of their robotic animal.
- 2. Discuss how these kinds of innovations can aid in scientific research and conservation efforts.

## **Educational Outcomes:**

Students will gain an understanding of how technology can be applied in scientific research and conservation.

They will develop creative thinking skills by designing their robotic animals.

The lesson will foster an appreciation for the intersection of technology and the natural world.

# Exploring Robotics: Scratch and Scratch Jr.

If you are looking to get your child into coding, an introduction to Scratch and ScratchJr.might be a next great step. These are intuitive, creative environments designed to make the learning process fun and engaging.

**Scratch** is ideal for children aged 8 and up. It's a free online platform developed by MIT, allowing kids to create their own interactive stories, games, and animations. Scratch uses a block-based coding system, which means children can learn the fundamentals of programming by snapping together coding blocks to make their characters move, jump, dance, and sing. It's a fantastic way to develop logical thinking, problem-solving skills, and digital literacy, all while unleashing their creativity. Create an account <a href="here">here</a> and be sure to visit the <a href="tutorials page">tutorials page</a>.

**ScratchJr** is tailored for younger children, ages 5 to 7, and offers a simpler interface. Available as a free app, ScratchJr enables kids to create their own stories and games by connecting graphical programming blocks, similar to Scratch but with more basic concepts. It's a wonderful introduction to the world of coding, helping younger children develop early math and literacy skills, as well as the ability to design and express themselves with the computer. Get the Scratch Jr. App

Both platforms are user-friendly and do not require prior coding experience. They offer a safe, encouraging space for children to experiment, explore, and discover the joys of coding at their own pace. We believe that introducing your children to Scratch or ScratchJr could be a significant step in nurturing their interest in technology and creativity.

# Culinary Adventures in "The Wild Robot" Unit Study

Welcome to the "Culinary Adventures" section of our "The Wild Robot" unit study, where the enchanting world of Roz and her island comes to life through the joy of cooking and exploration of flavors. This part of our program is thoughtfully crafted to combine the themes of the book with hands-on culinary experiences, making learning deliciously fun and engaging.

## Connection

"The Wild Robot" by Peter Brown presents a rich tapestry of natural settings and survival themes, offering a perfect backdrop for culinary exploration. In this section, we invite your children to embark on an adventure in the kitchen, creating dishes inspired by the story's environment and Roz's experiences. Whether it's foraging for ingredients like Roz and her animal friends or preparing meals that reflect the simplicity of island life, these activities are designed to deepen the connection with the book while teaching valuable cooking skills.

#### Fresh and Clean

Our Culinary Adventures will not only be about preparing food; they're an opportunity to explore the relationship between nature and what we eat, much like Roz discovers the island's edible offerings. The recipes and activities are tailored to be child-friendly, ensuring that safety and simplicity go hand in hand with fun and creativity.

#### Life Skills

As your children measure, mix, and cook, they'll be developing important life skills. These activities are also a wonderful way for your family to bond and enjoy the fruits of your culinary efforts together. Children both young and old can feel pride over creating something from start to finish, having made an entire meal or snack on their own with little to no help!

We hope that the Culinary Adventures section will bring an added flavor to your family's journey through "The Wild Robot."

# **Culinary Adventures**

**Objective:** To use cooking as a tool to enhance homeschooling, linking themes from "The Wild Robot" with practical life skills, mathematics, literacy, and family bonding.

#### **Overview for Parents:**

Incorporate an exciting culinary dimension into our "The Wild Robot" study unit. Through this approach, cooking becomes not just a way to explore the book's themes but also a method to teach valuable life skills, mathematics (via measurement), and literacy (by following recipes). These cooking sessions are perfect opportunities for family bonding and can complement readings and discussions about the book.

#### **Materials Needed:**

Recipes for Mud Pudding, Nut Butter and Oatmeal Energy Bars, Vegetable Stew, Forest Island Smoothie, and Fish Tacos.

Ingredients for each recipe.

Kitchen tools (measuring cups, bowls, utensils, etc.).

"The Wild Robot" book for reference during discussions.

#### **Activities:**

## **Recipe Introduction:**

1.Briefly introduce each recipe and its connection to "The Wild Robot."

Mathematics in Cooking:

Use measuring ingredients as a practical way to teach measurement and basic arithmetic. Discuss units of measurement and how to adjust recipe quantities depending on how much you would like to make.

## **Literacy and Comprehension:**

1. Have children read the recipe steps aloud to practice reading skills and following directions.

# **Cooking Activity:**

1. Involve children in the preparation of the recipes, focusing on kitchen safety and proper techniques.

## Family Bonding and Discussion:

1. Use snack time to discuss "The Wild Robot" debate topics. Encourage open conversation and sharing of ideas.

## **Reading Session:**

1. Enjoying snacks, especially those that are related to the book, is a great time to continue your reading of "The Wild Robot".

## **Instructional Notes for Parents:**

- 1.Prioritize safety in the kitchen, especially when handling knives or heat sources. These are our favorite child friendly knives that we use with toddlers children.
- 2. Tailor the complexity of cooking tasks to suit the children's ages and abilities.

#### **Conclusion:**

This culinary-focused approach provides a rich, multi-sensory learning experience, deepening the exploration of "The Wild Robot" and its themes. It's an innovative way to blend education in cooking, math, literacy, and critical thinking.

## **Additional Tips:**

Document your culinary creations and their corresponding parts of the story, perhaps in a photo journal or blog.

Encourage children to come up with their own recipe ideas that could be linked to the book.

Utilize these activities to foster a love for cooking, reading, and collaborative family learning.

# Shopping List for "The Wild Robot" Culinary Activities

**Overview**: This shopping list includes all the necessary ingredients for the culinary activities aligned with "The Wild Robot" study. These recipes are perfect for bringing the themes of the book to life through cooking, while teaching valuable life skills and promoting family bonding.

## 1. Homemade Mud Puddle Chocolate Pudding (Serves 4-6)

Granulated sugar: 1/2 cup

Unsweetened cocoa powder: 1/3 cup

Cornstarch: 1/4 cup Salt: 1/4 teaspoon

Milk or a non-dairy alternative: 2 3/4 cups

Unsalted butter: 2 tablespoons Vanilla extract: 1 teaspoon Whipped cream (for topping) Gummy worms (for garnish)

## 2. Nut Butter and Oatmeal Energy Balls

Rolled Oats: 1 cup

Natural Peanut Butter: 1/2 cup

Honey: 1/3 cup

Mini Chocolate Chips: 1/2 cup Vanilla Extract: 1 teaspoon

Salt: A pinch (optional, as per taste)

# 3. Vegetable Stew (Serves 4-6)

olive oil: 1 tbsp

onion: 1 medium

garlic: 2 cloves

carrots: 2 medium

celery:2 stalks

potato:1 medium

zucchini: 1

diced tomatoes:1 can (14.5 oz)

vegetable broth: 4 cups

dried thyme: 1 tsp dried basil: 1 tsp

Salt and pepper, to taste

frozen peas:1 cup frozen corn: 1 cup

## 4. Forest Island Smoothie (Serves 4)

Mixed berries (fresh or frozen): 2 cups

Bananas:2

Apple juice or water: 1 cup Plain or vanilla yogurt: 1 cup Optional: baby spinach or kale Ice cubes (if using fresh fruit)

## 5. Fish Tacos (Serves 4)

White fish fillets (cod, tilapia, halibut): 1 pound

Olive oil: 1 tablespoon

Mild chili powder: 1 teaspoon

Paprika: 1 teaspoon

Salt and pepper to taste

Corn or flour tortillas: 8 small

Shredded lettuce or cabbage: 1 cup

Avocado: 1

Cherry tomatoes: 1/2 cup

Optional: shredded cheese: 1/2 cup

Lime wedges for serving

Optional: sour cream or plain yogurt

## **Additional Items:**

- Basic cooking supplies (e.g., oil, salt, pepper)
- Basic kitchen tools (e.g., measuring cups, bowls, blender, baking sheet, saucepan, whisk)

## Note:

Adjust the quantities based on your family's size and dietary preferences. These recipes are not only a delicious part of the "The Wild Robot" study but also offer a practical way to learn about cooking, measurement, and healthy eating. Enjoy your culinary journey alongside Roz's adventure!

# Culinary Adventures: Homemade Mud Puddle Chocolate Pudding

As we delve into the first few chapters of "The Wild Robot," we're creating mud pudding to symbolize Roz's initial encounter with the natural, earthy elements of the island, adding a sensory dimension to our reading adventure. This activity mirrors the wilderness setting of the story, enriching our connection with Roz's new and intriguing world.

## **Ingredients**

1/2 cup granulated sugar

1/3 cup unsweetened cocoa powder

1/4 cup cornstarch

1/4 teaspoon salt

2 3/4 cups milk (or a non-dairy alternative)

2 tablespoons unsalted butter

1 teaspoon vanilla extract

Whipped cream (for topping)

Gummy worms (for garnish)

#### **Instructions**

- 1. Mix Dry Ingredients: In a medium saucepan, whisk together sugar, cocoa powder, cornstarch, and salt.
- 2. Add Milk: Gradually whisk in the milk, ensuring that the mixture is smooth and the dry ingredients are fully dissolved.
- 3. Cook: Place the saucepan over medium heat. Cook the mixture, stirring constantly, until it thickens and comes to a gentle boil. This usually takes about 5 to 7 minutes.
- 4.Simmer: Reduce the heat to low and simmer for about 2 minutes, continuing to stir. The mixture should coat the back of a spoon when it's ready.
- 5. Add Butter and Vanilla: Remove the saucepan from the heat. Stir in the butter and vanilla extract until the butter is completely melted and the mixture is smooth.
- 6. Chill: Pour the pudding into individual serving cups. Place a piece of plastic wrap directly on the surface of the pudding to prevent a skin from forming. Chill in the refrigerator for at least 2 hours.
- 7. Decorate and Serve: Before serving, remove the plastic wrap. Top each pudding cup with whipped cream to mimic a mud puddle. Place a few gummy worms on top of the whipped cream for a playful touch.

## **Educational Component:**

Discuss the different layers and components of soil, its role in supporting plant life, and how a healthy soil ecosystem is vital for the survival of many organisms.

Relate the mud pudding to Roz's initial arrival and adaptation to the island's environment, discussing how she learns to navigate and utilize her new surroundings, much like how plants utilize soil for growth.

Explore how organic matter decomposes in soil, contributing to nutrient cycling, and how this process supports the growth of plants that are essential for food chains.

# Culinary Adventures: Nut Butter and Oatmeal Energy Balls

It took Roz and friends a lot of effort to build their new home on the island. The energy balls can symbolize the energy and effort Roz puts into building her nest and adapting to her environment. It's a task that requires both creativity and stamina, much like the energy needed when children are involved in active play or learning.

## **Ingredients:**

1 cup rolled oats
1/2 cup natural peanut or almond butter
1/3 cup honey
1/2 cup mini chocolate chips
1 teaspoon vanilla extract
A pinch of salt

## **Equipment:**

Mixing bowl
Spoon or spatula
Measuring cups and spoons
Parchment paper (optional)
Baking sheet or large plate

## **Instructions**

- 1. Combine Dry Ingredients: In a mixing bowl, add the rolled oats and a pinch of salt.
- 2.Add Wet Ingredients: Add the nut butter, honey, and vanilla extract to the bowl.
- 3. Mix Together: Stir all the ingredients together until they are thoroughly mixed. The mixture should be slightly sticky but still manageable.
- 4,Add Chocolate Chips: Fold in the mini chocolate chips into the mixture.
- 5. Form Balls: Use your hands to roll the mixture into small balls, about the size of a walnut.
- 6.Chill: Place the energy balls on a baking sheet lined with parchment paper. Chill in the refrigerator for at least 30 minutes to set.

7. Serve: Enjoy these energy balls as a healthy, energizing snack!

Serves: This recipe makes about 12-15 energy balls.

# **Educational Component:**

Discuss how certain foods, like oats and peanut butter, provide us with energy, similar to how Roz needs energy for her activities.

Talk about the benefits of healthy unprocessed snacks, highlighting ingredients like oats, honey, and nut butters.

Relate the energy balls to Roz's resourcefulness on the island, using available resources to adapt and survive.

# Culinary Adventures: Vegetable Stew

The Vegetable Stew in our "The Wild Robot" unit study symbolizes the warmth and nurturing aspects of Roz as she transitions into the role of a mother. Just as the stew combines various ingredients to provide comfort and nourishment, Roz brings together diverse elements of the island to care for Brightbill. This dish serves as a metaphor for Roz's journey, embodying the love, care, and protection she offers, mirroring the wholesome and nurturing nature of a hearty, home-cooked meal.

## **Ingredients:**

- 1 tablespoon olive oil
- 1 medium onion, chopped
- 2 cloves garlic, minced
- 2 medium carrots, peeled and diced
- 2 stalks celery, diced
- 1 medium potato, peeled and cubed
- 1 zucchini, chopped
- 1 can (14.5 oz) diced tomatoes (with juice)
- 4 cups vegetable broth
- 1 teaspoon dried thyme
- 1 teaspoon dried basil
- Salt and pepper, to taste
- 1 cup frozen peas
- 1 cup frozen corn

#### **Instructions:**

1. Prepare the Vegetables: Wash, peel, and chop all the vegetables into bite-sized pieces.

#### Sauté the Aromatics:

- 2. In a large pot, heat the olive oil over medium heat. Add the chopped onion and minced garlic. Sauté until the onion is translucent, about 3-4 minutes.
- 3. Add Vegetables: Add the carrots, celery, potato, and zucchini to the pot. Cook for about 5 minutes, stirring occasionally.
- 4. Simmer the Stew: Pour in the diced tomatoes (with their juice) and vegetable broth. Add the thyme, basil, salt, and pepper. Stir well.

- 5. Bring the mixture to a boil, then reduce the heat to low and let it simmer, covered, for about 20 minutes, or until the vegetables are tender.
- 6. Add Frozen Vegetables: Add the frozen peas and corn to the pot. Let them simmer for another 5 minutes.
- 7. Final Adjustments: Taste the stew and adjust the seasoning if needed.
- 8. Serve: Serve the vegetable stew hot. It can be paired with crusty bread or a side salad.

## **Discussion Points for the Unit Study:**

While enjoying the stew, discuss how Roz might forage and gather food if she needed to care for others on the island.

Talk about the importance of each vegetable in the stew and how different ingredients come together to make a wholesome meal, much like how different characters in the story come together to form a community.

# Culinary Adventures: Forest Berry Island Smoothie Recipe

As we get into the parts of "The Wild Robot" where Roz is really getting the hang of island life, we're blending up some forest berry island smoothies. It's our tasty way of celebrating her adventures in the wild, bringing the flavors of the forest right into our reading session.

## **Ingredients**

1 cup of mixed berries (such as blueberries, strawberries, raspberries, and blackberries – fresh or frozen)

1 ripe banana (for creaminess and natural sweetness)

1/2 cup of apple juice or water

1/2 cup of plain or vanilla yogurt (for a vegan option, use almond or soy yogurt)

A few ice cubes (if using fresh fruit)

Optional: A handful of baby spinach or kale for added nutrients (this will add extra vitamins without altering the taste significantly

Optional toppings: A sprinkle of granola, a few berry slices, or a mint leaf for garnish

# **Equipment**

Blender

Measuring cups

Glasses for serving

#### **Instructions**

- 1. Prepare the Fruit: If using fresh berries, wash them thoroughly. If using frozen berries, they're ready to use as-is.
- 2. Blend Ingredients: In a blender, combine the mixed berries, banana, apple juice (or water), and yogurt. Add the greens (spinach or kale) if using.
- 3. Adjust Consistency: If you used fresh fruit and prefer a colder smoothie, add some ice cubes. Blend on high speed until smooth. Add a little more liquid if the smoothie is too thick.
- 4. Serve: Pour the smoothies into glasses. Garnish with a sprinkle of granola, berry slices, or a mint leaf if desired.

5. Enjoy: Serve the smoothies immediately and enjoy a taste of the island!

# **Educational Component**

Discuss how the ingredients in this smoothie could be found in a temperate forest setting similar to Roz's island. For instance, berries are a common wild fruit in such environments.

Use this opportunity to talk about foraging for food in the wild, and how different animals might rely on berries and other forest fruits for nourishment.

# Culinary Adventures: Island Fish Tacos Recipe

To wrap up Roz's time on the island in "The Wild Robot," we're whipping up some fish tacos to get a taste of the island's wonders.

## **Ingredients**

- 1 pound of white fish fillets (like cod, tilapia, or halibut)
- 1 tablespoon olive oil
- 1 teaspoon mild chili powder
- 1 teaspoon paprika

Salt and pepper to taste

8 small corn or flour tortillas

1 cup shredded lettuce or cabbage

1 avocado, sliced

1/2 cup cherry tomatoes, halved

1/2 cup shredded cheese (optional)

Lime wedges for serving

Optional: sour cream or plain yogurt for topping

## **Equipment**

Baking sheet

Mixing bowls

Oven (for parents to operate)

Cutting board and knife (for parent supervision)

## **Instructions**

- 1. Preheat Oven and Prepare Fish: Preheat the oven to  $400^{\circ}F$  ( $200^{\circ}C$ ).
- 2. In a bowl, mix the olive oil, chili powder, paprika, salt, and pepper. Brush this mixture over both sides of the fish fillets.
- 3. Bake the Fish: Place the seasoned fish on a baking sheet.
- 4. Bake in the oven for 10-15 minutes or until the fish flakes easily with a fork. (This step should be done by an adult.)

- 5. Prepare the Toppings: While the fish is baking, kids can help shred the lettuce or cabbage, slice the avocado, and halve the cherry tomatoes.
- 6. Warm the Tortillas: Wrap the tortillas in foil and warm them in the oven for the last 5 minutes of the fish's cooking time.
- 7. Assemble the Tacos: Once the fish is cooked and cooled slightly, flake it into pieces with a fork. Lay out the tortillas and assemble your tacos by placing some fish on each tortilla, then topping it with your choice of lettuce, avocado, tomatoes, cheese, and a squeeze of lime. Add a dollop of sour cream or yogurt if desired.

Enjoy: Serve the tacos immediately and enjoy a meal inspired by island life!

## **Educational Component**

Discuss the importance of fish as a food source for many island communities and how it's a sustainable protein option.

Talk about different types of fish that might be found around an island similar to the one in "The Wild Robot."

Use this opportunity to explore marine life and the ecological significance of oceans.

# Nature + Survival Studies in "The Wild Robot" Unit Study

Welcome to the "Nature + Survival Studies" section of our "The Wild Robot" unit study, a segment dedicated to immersing your child in the rich tapestry of the natural world and the essential skills for thriving within it. This part of our program draws inspiration from the adventures of Roz, the robot protagonist, as she navigates life on a remote island in Peter Brown's captivating story.

In this section, we bridge the captivating narrative of "The Wild Robot" with real-life applications, focusing on the interconnectedness of nature and the practical skills needed for survival. Just as Roz learns to adapt to her environment and overcome various challenges, we aim to equip your child with a similar understanding and appreciation of the natural world.

#### **Observe and Interact**

Our "Nature + Survival Studies" activities are designed to be hands-on and engaging, encouraging your child to step outside, observe, and interact with nature. From identifying local flora and fauna to understanding weather patterns, these activities foster a deep respect and curiosity for the environment. Moreover, we delve into fundamental survival skills such as building shelters, foraging for food, and basic first aid, mirroring the skills Roz acquires throughout her journey.

#### Resourcefulness

The goal of this section is to cultivate not only a love and appreciation for nature but also to instill a sense of self-reliance and resourcefulness. These are skills that extend far beyond the unit study, offering lifelong benefits. Through practical experiences and outdoor adventures, your child will gain a hands-on understanding of how to coexist with and respect our natural surroundings.

As your child embarks on this explorative journey of nature and survival skills, they will not only draw parallels to Roz's experiences but also develop a set of valuable skills and knowledge. We are excited to guide them through this journey of discovery, fostering a connection with nature that resonates deeply with the themes of "The Wild Robot."

## Nature + Survival Studies

This section of the study is particularly significant as it mirrors Roz's journey in the book, where her survival depends heavily on her ability to adapt to and understand her natural surroundings.

## **Exploring Nature and Survival Together:**

- Observing Nature: Just as Roz learns about the plants and animals on her island, families are
  encouraged to explore local trails and natural settings. This exploration is not just about seeing
  nature but about observing and understanding the ecosystem, much like Roz does. Identifying
  local wildlife and plants deepens children's connection to the environment and fosters a sense of
  wonder.
- Learning Survival Skills: Parallel to observing nature, families will engage in practical survival skills such as building shelters, foraging for food, and understanding basic first aid. These skills are vital in the story for Roz and offer valuable life lessons for children, teaching them resilience, resourcefulness, and adaptability.

## **Materials**

Badge Coloring Sheet: At the end of this section you will find a coloring sheet. Your child can color in the associated badge as you complete the activities within that survival skill.

Main Lesson Sketchbook

<u>Nature Journal</u> (optional but highly recommended to have the one associated with your current season)

Binoculars/ Magnifying glass (optional) Guide to local wildlife (optional)

Basic First Aid Kit Firewood and a lighter/ flint/ matches A compass

Nature + Survival Studies: Survival badges

Learn about and complete the following 9 skills to earn a survival badge! When your child has successfully earned their badge, they can enjoy coloring in the appropriate badge on the tracker sheet.

1. Shelter Building

Activity: STEM Challenge: Shelter Building for Roz

Nature: Hit the trails and look for animal shelters. What did you find? Birds' nests? Beaver dens? If resources allow, challenge your child to build a life size shelter for them! Consider looking for dry ground, natural cover and a place near water and food to begin your build.

Connection to Roz and "The Wild Robot": This activity is inspired by the part in the book where Roz builds a shelter for herself and later for Brightbill, illustrating the importance of shelter in survival.

2. Foraging for Food

Activity: If season allows, use foraged ingredients in your cooking. If unfamiliar with foraging, head to your garden or a local farm to pick fresh berries and vegetables for your Culinary Adventures recipes. If the season does not allow, discuss.

Nature: Head out on a nature walk to learn about edible plants and fruits. Remember, you don't have to know this in order to go explore! You just have to want to learn alongside your child. Be sure to just observe and not eat what you find on the trail unless you are with someone who is a seasoned forager. Discuss which plants are safe to eat and the nutritional value of different wild foods. Alternatively, involve them in planting an edible garden.

Connection to Roz and "The Wild Robot": After Roz adopts Brightbill, she learns to forage for food, demonstrating the vital skill of identifying and gathering edible resources in nature.

## 3. Water Sourcing and Purification

Activity: Demonstrate methods of sourcing and purifying water, such as boiling or using purification tablets. Extension; <u>connect with nature and make a water filter!</u>

Nature: Hit the trail and look for water sources. Collect water samples from any water you find and compare the sediments inside of the samples. Which sample has the least sediment (puddle? pond? river? creek? lake?) Why might this be? Pour the water through your homemade water filter. Emphasize that just because water is clear doesn't mean that it is safe to drink- it must be purified first.

Connection to Roz and "The Wild Robot": As Roz needs water for survival and for caring for Brightbill, this skill highlights the necessity of finding and purifying water in a natural setting.

## 4. Animal Behavior and Safety

Activity: Teach how to observe wildlife respectfully and safely, understanding animal behaviors, and the importance of preserving natural habitats. Choose an animal to study and learn more about its behavior. If you have a family pet, use them as a source of inspiration in your discussions. What do they do to show us that they are happy? Scared? Angry? Discuss when animals feel more threatened or feel a need to protect (injured, hungry, protecting their young).

Nature: Hit the trail and observe as many animals as you can. What are they telling you? Be sure to observe from a safe distance.

Connection to Roz and "The Wild Robot": Roz's interactions with various animals on the island underscore the importance of understanding and respecting wildlife, a crucial aspect of coexisting with nature.

#### 5. First Aid

Activity: Conduct basic first aid training. Teach children how to treat minor injuries such as cuts, bruises, and sprains. Use role-playing to demonstrate how to use a first aid kit effectively as you dissect a basic kit and explore what is inside and why it's included.

Nature: Get outside! As you walk, discuss how to prevent common injuries and illnesses in outdoor settings, like staying hydrated, recognizing poisonous plants, and what to do if they get lost. As you walk, and at predetermined spots, stage a first aid scenario. For example, you could have a sheet of paper with scenarios that the kids must solve "\_\_\_\_\_ gets poison Ivy!" "\_\_\_\_\_ sprains an ankle while crossing a log". Discuss with them how certain natural resources can be used in emergencies, such as using a stick as a splint

Connection to Roz and "The Wild Robot": This links to the part of the story where Roz repairs her broken foot, emphasizing the importance of first aid knowledge in handling injuries.

#### 6. Fire Safety

Activity: Teach how to safely start and put out a fire, discuss the dangers of fire in natural settings, and create a fire emergency plan for home.

Nature: Time for a bonfire! In an age appropriate way, have kids help make a bonfire and responsibly put it out . Enjoy roasted apples or smores!

Connection to Roz and "The Wild Robot": When Roz and the animals gather around a fire for warmth, it reflects the importance of knowing how to handle fire responsibly in the wild.

## 7. Camouflage and Stealth

Activity: Camouflage your Model Roz!

Nature: Hit the trail with friends and play a game of hide and seek! Kids can be thoughtful in what they wear to their forest play to best camouflage into their surroundings. Consider bringing clothespins so children can use natural materials to help their camouflage! (great time to look out for poisonous plants)

Connection to Roz and "The Wild Robot": Roz uses camouflage and stealth to observe and interact with the island's wildlife without disturbing them, demonstrating these as key survival strategies.

#### 8. Observation

Activity: Smell Identification: Use various household items with distinct smells (e.g., coffee, citrus fruits, spices). Have the children smell each item while blindfolded and try to identify them. This hones their sense of smell and vocabulary to describe scents.

Nature: During a nature walk, encourage children to quietly observe their surroundings. Find a quiet place to sit and test their observation skills. Have them record, and later graph the animals that they see.

Connection to Roz and "The Wild Robot": Roz had to observe carefully to understand the landscape, weather patterns, and natural resources available to her. This understanding was essential for her to navigate the island safely and make use of its resources.

## 9. Navigational Skills

Activity: Utilize compasses and maps for basic navigation lessons. Set up a simple orienteering course in your own home where children can apply these skills. *Connect this with the Living Room Coding Challenge where children must use "North, East, South West" as their directional codes.* 

Nature: Create a fun compass treasure hunt at home, on the trail or at a local park. Here are some tips on how to make a <u>great compass treasure hunt</u>.

Connection to Roz and "The Wild Robot": As Roz explores the island, the story highlights the importance of navigation skills for exploring and surviving in unfamiliar territories.

# Integrating Debate in "The Wild Robot" Unit Study

Welcome to the "Integrating Debate" section in our "The Wild Robot" unit study. In Peter Brown's captivating tale, Roz, the robot, encounters various challenges and moral dilemmas that present excellent opportunities for deeper reflection and discussion. The "Integrating Debate" section capitalizes on these moments, encouraging children to articulate their thoughts, consider different perspectives, and develop critical thinking skills.

#### **Structured Debate Activities**

Through structured debate activities, your child will explore key themes such as the interaction between technology and nature, the ethical considerations of artificial intelligence, and the complexities of adaptation and survival in unfamiliar environments. These debates are not only about understanding Roz's journey but also about connecting the story to broader real-world issues.

## **Open-minded Environment**

In this section, we aim to foster a respectful and open-minded environment where children can express their opinions and learn to appreciate diverse viewpoints. The debates are structured to be age-appropriate and engaging, ensuring that children can participate comfortably and confidently.

#### Life Skills

The skills gained through these activities – articulation, reasoning, and active listening – are invaluable. They go beyond the scope of the book and can be applied in many areas of life and learning. As your child navigates through the engaging story of "The Wild Robot," these debate sessions will provide a platform for them to critically engage with the book's content, deepening their understanding and enhancing their communication skills.

# Integrating Debate into "The Wild Robot" Study

**Objective:** Families will engage in meaningful discussions based on debate topics that arise from "The Wild Robot." These discussions aim to enhance critical thinking, encourage articulate expression, and foster a deeper understanding of the book's themes.

#### **Overview for Parents:**

We've prepared a series of debate topics that align with key moments in the book. These topics are designed to be flexible, allowing you to integrate them into your family learning in a way that suits your children's ages, interests, and educational goals.

#### **Materials Needed:**

- A list of debate topics (provided).
- Journal or writing materials for note-taking or journaling.
- Optional: Timer for regulated debate sessions.
- Fact, Opinions, Robots by

#### **Methods of Incorporation:**

## **Lunchtime Discussions:**

- 1. Casual conversation over meals can be an excellent time to introduce and explore these topics.
- 2. Pose a question and encourage open-ended discussion.

## **Structured Family Debates:**

- 1. Organize a more formal debate setting where each family member can present their views on a topic.
- 2. This method is particularly beneficial for developing public speaking and argumentation skills.

#### Journaling:

- 1.Encourage children to write down their thoughts and opinions on the debate topics in their Main Lesson book..
- 2. This method is suitable for reflective learners and helps in developing writing skills.

# **Creative Expression:**

- 1. Children can express their views on a topic through art, music, or creative writing.
- 2. This approach is ideal for children who are more artistically inclined.

#### **Instructions for Parents:**

- 1. Introduce the debate topic after reading the relevant part of "The Wild Robot."
- 2. Choose a discussion method that aligns with your child's learning style and your family's dynamic.
- 3. Encourage respectful listening and articulate expression of ideas.
- 4. Facilitate the discussion to ensure all voices are heard and guide it to stay on topic.
- 5. Conclude each discussion by summarizing the key points raised and relating them back to the book and real-world implications.

#### **Conclusion:**

These debate topics are intended to enrich your family's reading experience, providing a platform for deeper engagement with the story and its themes. By discussing these topics, children will develop critical thinking skills and gain a more comprehensive understanding of the narrative and its relevance to their world.

## **Additional Tips:**

- Adapt the complexity of the discussion based on your children's ages and comprehension levels.
   We have provided two distinct lists to work from. Use them as a guide and choose what's best for your family, or add in others!
- 2. Encourage children to research or read more about a topic if they show particular interest.
- 3. Use these discussions as an opportunity to teach the value of differing opinions and respectful debate.

# Integrating Debate: "Fact vs. Opinion" Workshop

**Objective:** To help children differentiate between facts and opinions and understand the importance of recognizing the two in everyday life. Great as a reminder for many older kids too as they prepare to debate many thoughtful questions and topics..

#### **Materials:**

Paper and markers/crayons
"Facts vs. Opinions vs. Robots" by Michael Rex
Pre-written statements (a mix of facts and opinions)
Main Lesson Sketchbook
Youtube Read Aloud

#### **Procedure:**

- 1. Read the book "Facts vs. Opinions vs. Robots". If you can't find a copy of the book at your library there are readings on Youtube.
- 2. Start with a brief discussion about what they learned from the book. Define a 'fact' as something that can be proven true, an 'opinion' as what someone thinks or feels.
- 3. Choose a handful of the pre-written statements to use for this activity; or make up some of your own! Note that there are questions geared towards both the older and younger learners.
- 4. As you read statements, have your child classify them as either OPINION or FACT..

  Recommended: For active learners, consider writing FACTS on a piece of printer paper, and

  OPINIONS on another. Post these on opposing sides of the room and ask your child to move to
  the proper area of the room after you've read a statement.

Remember: For some children this will be an introduction to categorizing facts and opinions. If there is confusion, adjust the statements to be as relevant as possible; focusing on something in your room. "This rug is blue" "I like this rug".

- 5. Ask each member of the family to come up with their own examples of a fact and an opinion
- 6. Have everyone share their statements. Discuss why each statement falls into its category.
- 7. For the art lovers, let the kids draw, paint, create their own robots in their Main Lesson sketch books, and next to it, write a fact and an opinion about their robot.

For example,

"My robot has two arms"

"I think my robot is the coolest."

#### **Reflection and Discussion**

1. Conclude the activity by discussing why it's important to know the difference between facts and opinions in daily life. Encourage them to think about how this understanding can help them in learning, friendships, and understanding the world.

2. For older children, consider how this understanding helps them with presenting their debate topics? Why is it important to consider facts vs. opinions?

## **Learning Outcome:**

Children will develop critical thinking skills and learn to distinguish between objective information and subjective viewpoints. They also get to exercise their creativity and have fun with the robot theme.

Fact or Opinion Statements for Big Kids

STATEMENTS MADE FROM THE VERY EARLY CHAPTERS OF THE BOOK.

#### **FACTS**

Roz, the robot in "The Wild Robot," wakes up for the first time on a green and wild island.

Roz looks different from the animals on the island.

The island has lots of trees, rocks, and animals.

"The Wild Robot" is a book with a robot and animals in it, written by Peter Brown.

Roz learns how to walk and move around on the island.

Roz, the robot in "The Wild Robot," finds herself on a remote island after a shipwreck.

The story begins with a sinking cargo ship and hundreds of crates floating in the ocean.

Roz initially struggles to navigate the rugged and wild terrain of the island.

The author of "The Wild Robot" is Peter Brown.

Roz is a robot with the ability to learn and adapt to her environment.

#### **OPINIONS**

The pictures at the beginning of "The Wild Robot" are really pretty and make the island look like an exciting place.

Roz seems very brave when she starts moving on the island.

The animals on the island are interesting and funny when they see Roz.

The first part of "The Wild Robot" is fun because Roz is like a detective, exploring a new place.

It's exciting to guess what Roz will do next on the island.

The opening scenes of "The Wild Robot" are intriguing and set the stage for an adventurous story.

Roz's initial attempts to interact with the island environment are fascinating.

The descriptive language in the first few chapters of "The Wild Robot" vividly brings the island to life.

The beginning of "The Wild Robot" makes the reader curious about how Roz will survive.

The artwork in the initial chapters of "The Wild Robot" complements the story beautifully.

## "ROBOT IMAGINATIVE Statements/Inventions

BONUS OPTION; For an extra challenge with older kids who are understanding the concept, add in a third category with imaginative statements and label this Imaginative or Robot.

Imagine if Roz can learn to plant flowers and make the island even prettier.

What if Roz finds a treasure map on the island that leads to a secret place.

What if Roz can change colors like a chameleon to hide from the animals?

Imagine if Roz can jump really high to see the whole island from above.

Perhaps Roz can make friends with a talking fox who shows her around the island.

Imagine if Roz has special features hidden inside of her that will help her survive on the island.

What if Roz discovers hidden abilities that she didn't know she had while adapting to the

island.

What if Roz can utilize solar power to recharge herself on the island?

# Fact or Opinion Statements for Younger Children STATEMENTS UNRELATED TO THE STORY

## 20 Simple Fact Statements

Cats are animals.

The sky is above us.

Apples are a type of fruit.

Fish live in water.

Birds have feathers.

Cars have wheels.

Trees grow leaves.

Dogs can bark.

The sun rises in the morning.

There are seven days in a week.

Elephants have trunks.

Rain is made of water.

Snow is cold.

Fire is hot to touch.

Bananas are yellow when ripe.

A year has twelve months.

Frogs can jump.

The moon orbits the Earth.

Ice is frozen water.

## 20 Simple Opinion Statements

Strawberries are the best fruit.

Winter is better than summer.

Purple is the prettiest color.

Cats are nicer than dogs.

Chocolate ice cream tastes better than vanilla.

Rainy days are more fun than sunny days.

Lions are the most interesting animals.

Flying in an airplane is exciting.

Pizza is the most delicious food.

Clowns are funny.

Going to bed early is boring.

Roses smell nicer than other flowers.

Superheroes are the best characters in movies.

Bicycles are better than scooters.

Swimming is the best way to play in water.

Dragons are the coolest mythical creatures.

Camping is the best kind of vacation.

Carrots taste better than peas.

Birthday parties are the best kind of parties.

# Integrating Debate: Questions for Older Kids

Below you will find a list of questions to get children thinking.

**Robotics in Daily Life:** Is the integration of robots into daily life beneficial or harmful to society?

**Technology vs. Nature:** Should technology be used to control or alter natural environments, or should nature be left undisturbed?

**The Definition of Life:** What criteria should be used to define something as 'alive'? Does Roz, as a robot, meet these criteria?

**Artificial Intelligence Ethics:** Should robots and AI be programmed to experience emotions and make independent decisions?

**Survival Skills in Modern Society:** How important is it for people to learn basic survival skills in today's technology-driven world?

**Importance of Community:** How essential is a sense of community and belonging for survival and well-being?

**Adapting to Change:** Is adapting to change always necessary, or are there times when resisting change is more appropriate?

**Animal Rights and Artificial Intelligence:** Do artificially intelligent beings deserve rights and protection (like some animals)?

**Human Impact on Wildlife:** Are humans responsible for protecting endangered species and habitats, or is it a natural process of change?

**Environmental Conservation vs. Progress:** Where should the line be drawn between environmental conservation and technological or societal progress?

# Integrating Debate: Questions for Youngers Kids

Below you will find a list of questions to get children thinking.

**Being Different:** Is it okay to be different from everyone else?

**Exploring Nature:** Is exploring outside better than playing inside with technology?

Learning from Mistakes: Is making mistakes a good way to learn?

**Importance of Friendship:** Is it more important to have many friends or a few very close friends?

Animals as Friends: Can animals be considered our friends just like people?

Helping Others: Should you always help someone in need, even if it means going out of your way?

**Sharing with Others**: Is it always important to share your things with others?

**Bravery and Courage:** Is it more important to be brave or to be safe?

Following Rules: Should we always follow rules, or are there times when it's okay to break them?

Caring for the Environment: Should we plant more trees and create gardens to help wildlife?

# Writers Workshop in "The Wild Robot" Unit Study

Welcome to the "Writers Workshop" section of our "The Wild Robot" unit study, a space where the imaginative world of Peter Brown's story serves as a springboard for your child's creative writing journey. This segment of our program is dedicated to nurturing your child's writing skills, inspired by the rich narrative and vivid imagery of "The Wild Robot."

## **Communicate Creatively**

Our Writers Workshop is designed to encourage your child to delve deeper into the nuances of the story, to see the world through Roz's eyes, and to articulate their interpretations and feelings. Whether it's crafting a diary entry from Roz's perspective, imagining alternative adventures, or describing the lush landscapes of the island, each activity aims to enhance your child's ability to communicate creatively and effectively.

## **Expressive Language**

Beyond fostering a love for writing, this workshop also emphasizes the development of important language skills such as vocabulary enhancement, narrative structuring, and expressive use of language. We encourage children to experiment with different styles and formats, making their writing experience as diverse and enriching as possible.

#### Confidence

The Writers Workshop is not just about honing writing skills; it's an opportunity for your child to connect more deeply with "The Wild Robot," to explore their imagination, and to articulate their thoughts and ideas with confidence. We believe that the ability to express oneself through writing is a valuable life skill, and what better way to develop this than through the captivating story of Roz?

We hope your child finds this section of the unit study both enjoyable and beneficial, and we look forward to witnessing their growth as young writers.

Writers Workshop: Writing Prompts

As part of our "The Wild Robot" unit study, we have included a collection of 40 thoughtfully crafted writing prompts. These prompts are designed to enhance your child's engagement with the book, encourage personal reflection, and develop their writing skills. Here's how you can incorporate these writing prompts into your family's journey through the study.

**Materials:** 

Self Reflection Prompts Journal Prompts Main Lesson Sketchbook

Flexibility in Use:

<u>Your Choice on Frequency:</u> You choose to use these journal prompts as you like; daily, weekly, or at any pace that suits your child and your family's schedule. The prompts do not need to be completed in any particular order, so feel free to select the ones that resonate most at any given time.

<u>Adaptability:</u> The prompts vary – some are reflections on personal experiences, while others delve into specific moments in the book's plot. This variety allows for flexibility in how they are used, catering to your child's interests and current reading progress.

**Encouraging Thoughtful Engagement:** 

<u>Deepening Comprehension:</u> The prompts are designed to encourage your child to think more deeply about the themes, characters, and events in "The Wild Robot." This reflection can deepen their understanding and enjoyment of the story.

<u>Developing Empathy and Perspective:</u> Many prompts ask your child to put themselves in the shoes of the characters, fostering empathy and a broader perspective on the challenges and decisions faced by Roz and her friends.

**Creative Expression:** 

<u>Fostering Creativity:</u> Encourage your child to be creative in their responses. They might choose to write, draw, or even create comic strips in response to the prompts.

<u>Building Writing Skills:</u> Regular journaling based on these prompts helps in developing writing skills, including expression, grammar, and narrative structure.

## **Using the Main Lesson Book:**

<u>A Special Keepsake:</u> The Main Lesson Book is a perfect place for your child to record their responses to these prompts. Over time, it will become a valuable keepsake of their thoughts and creativity during this unit study.

REMEMBER: Every child is a reader and every child is a writer. They may not yet be writing or reading <u>words</u>, but they might be reading and writing letters, sounds, pictures, signs, body language or other. That means that if the focus of the activity is to reflect and write, then children who are not yet writing full sentences can be writing letters and sounds that start a word, they can draw pictures and shapes and can present their response aloud at the end of the session, then providing you the chance to take notes in the journal of their verbal response.

<u>Incorporating Art:</u> Alongside writing, children can be encouraged to include drawings or other artistic elements in their journal entries, making it a more holistic and expressive experience.

#### **Parental Involvement:**

Sharing and Discussion: Consider setting aside time to discuss these journal entries with your child. This can provide insights into their thoughts and feelings and offers an opportunity for meaningful family discussions.

Guidance and Support: While we encourage independence in journaling, your support and guidance, especially for younger children, can be beneficial. Help them understand the prompts and offer encouragement.

# Writers Workshop: Self Reflection Prompts

Here are 20 self reflection prompts that focus on the themes of survival, resilience, adaptability, and friendship.

**Survival in Nature:** Write about a time when you felt like you had to survive something challenging. How did you feel, and what did you learn?

**Building Resilience:** What does being resilient mean to you? Can you think of a character from a book or movie who showed resilience?

**Adapting to Change:** Describe a situation where you had to adapt to a big change. How did you handle it?

**The Value of Friendship:** What makes a good friend? Write about qualities your best friend has that you admire.

**Learning from Animals:** If you could be any animal for a day, which would you choose and why? How would you survive in the wild?

Overcoming Obstacles: Write about a time when you faced a difficult problem. How did you solve it?

**Nature's Lessons**: Spend some time outside and then write about what nature teaches us about survival and resilience.

**Helping Others:** Have you ever helped a friend in need? How did it make you feel?

Innovative Solutions: Think of a difficult situation. What are three creative ways you could solve it?

**Growth Mindset:** What is something you can't do yet, but you're trying to learn? How does it feel to keep trying?

**Teamwork in Action:** Describe a time when you worked with others to achieve something important.

**Understanding Emotions:** Write about a time when you were very happy and a time when you were sad. How did you handle both emotions?

Appreciating Differences: What is something unique about you that you are proud of?

**Empathy and Understanding:** Write a story where you put yourself in someone else's shoes. How did it feel?

**Courage in Everyday Life:** What does being brave mean to you? Give an example of a time you had to be brave.

**Discovering Personal Strengths:** What are your three greatest strengths? How do you use them in your daily life?

**The Power of Kindness:** Write about a time when someone's kindness made a big difference in your life.

Facing Fears: What is something that scares you? How might you overcome this fear?

**The Importance of Patience:** Describe a situation where you had to be patient. What did you learn from this experience?

**Celebrating Successes:** What is something you've accomplished that you are really proud of? How did you achieve it?

# Writers Workshop: Journal Prompts

Here are 20 journal prompts that relate to notable moments in the story.

**Roz's Arrival:** Imagine you're Roz, arriving on the island for the first time. Write about your first impressions and feelings

**Learning to Communicate:** Roz learns to communicate with the animals. Write about a time you had to find a way to communicate with someone who didn't speak your language.

**Adapting to the Environment:** Describe how Roz adapts to her new environment. What would you do to adapt if you were in her place?

**Building a Home:** Roz builds her own home on the island. If you were to build a home in the wild, what would it look like and what would you use to build it?

**Making Friends:** Roz makes friends with the otters. What qualities make Roz a good friend? How can you use those qualities in your own friendships?

**Protecting the Goslings:** How does Roz show care and protectiveness towards the goslings? Write about a time when you cared for someone or something.

**Facing Fears:** Roz is initially feared by the animals. Write about a time when you were misunderstood and how you overcame it.

**Learning from Mistakes:** Roz makes mistakes as she learns about life on the island. Write about a mistake you made and what you learned from it.

**The Changing Seasons:** How does Roz adapt to the changing seasons? Write about your favorite season and how you adapt to it.

**Survival Skills:** What survival skills does Roz learn? Write about a survival skill you know or would like to learn.

**The Power Outage:** When Roz loses power, she becomes immobile. Write about a time when you felt powerless and how you dealt with that feeling.

**Finding a Purpose:** Roz finds a purpose in caring for the goslings. What do you think your purpose is and why?

**Dealing with Loss:** Roz experiences loss in the story. Write about a loss you have experienced and how you coped with it.

**The Storm:** Describe Roz's experience during the storm. Write about a time when you had to face a difficult challenge.

**The Bear Attack:** Reflect on the bear attack and Roz's response. How do you think you would react in a dangerous situation?

**Respecting Nature:** How does Roz show respect for nature? Write about ways you can respect and care for the environment.

**Friendship with the Beavers:** Roz helps the beavers with their dam. Write about a time when you helped a friend with a project.

**Learning from Others:** Roz learns a lot from the animals. Who do you learn from and what have they taught you?

**Being Different:** Roz is different from the animals on the island. Write about a time when you felt different from others and how you embrace your uniqueness.

**The Journey Home:** Imagine Roz's thoughts and feelings on her journey home. Write a diary entry from her perspective about this experience.

# Character Studies in "The Wild Robot" Unit Study

Welcome to the "Character Studies" section of our "The Wild Robot" unit study. This segment is devoted to a deeper exploration of the rich and diverse characters that Peter Brown has so vividly brought to life in his story. Through this part of the study, your child will have the opportunity to delve into the personalities, motivations, and growth of the characters, enhancing their understanding and connection to the narrative.

#### **Explore the Traits**

"Character Studies" is designed to encourage your child to engage thoughtfully with the characters in "The Wild Robot." From Roz, our robot protagonist, to her animal companions like Brightbill the gosling, each character offers unique perspectives and lessons. We'll explore the traits that define these characters, their relationships with each other, and the changes they undergo throughout the story.

#### **Understanding Perspectives**

Our goal with the "Character Studies" section is to foster a deeper emotional connection between your child and the story's characters. Understanding characters' perspectives and emotions is a skill that extends beyond literary analysis; it nurtures emotional intelligence and interpersonal understanding.

#### **Human Nature and Relationships**

As your child progresses through these character studies, they will gain a richer appreciation of the story's narrative depth and the complexities of its characters. This exploration is not just about analyzing fictional beings; it's an avenue for your child to reflect on human (and robotic) nature and relationships.

We are excited to see your child's insights and growth as they journey through the character studies, deepening their engagement with "The Wild Robot" and enhancing their analytical and empathetic abilities.

# Character Studies: Character Journaling

**Objective:** To enhance a child's understanding of key characters in "The Wild Robot" by creating evolving character study pages in their Main Lesson Sketch Books as they progress through the book.

#### **Materials**

Main Lesson Sketch Books (8.5x11" with thick pages)

A variety of art materials (pencils, markers, watercolor paint, oil pastels, crayons)

FREE Wild Robot <u>Drawing guides</u> (optional)

# Procedure

#### **Introduction to Character Studies**

- 1. Begin by explaining what a character study is: an exploration of a character's traits, actions, and development in a story.
- 2. Discuss the importance of observing how characters change and grow throughout the book.
- 3. Initial Character Drawing + Reflection:

Roz The Robot Chapter 4

Fun Roz Drawing Activity: Part 1 and Part 2

Brightbill Chapter 27
Mr. Loudwing Chapter 28
Mr. Beaver Chapter 29

How to Draw a Beaver for Kids: Video

ChitChat the Squirrel Chapter 37
The Bears Chapter 46

4. Shortly after a key character is introduced in the book, pause the reading. Ask your child to create an initial drawing of the character in their Sketchbook based on their understanding so far. Encourage creativity in their representations. List attributes (if any) that you know about the character thus far.

# **Adding Details**

- As you continue reading and new traits or significant moments involving the character occur, pause to reflect.
- 2. Return to the character's page in their Sketchbooks to add details this could include words, phrases, or additional doodles that represent the character's traits, actions, or changes they undergo. It is important that even if your child notices that a character has changed (or their notes on a character are no longer true) that they do not erase their previous work. These additional entries show us that not only do people change, but our feelings and understanding of people change as we get to know them better.

#### **Discussion and Reflection**

1. After each addition to the character pages, hold a brief discussion. Encourage students to share their drawings and the rationale behind their added details. Facilitate a conversation about how the characters are developing and what these changes mean for the story.

### **Continuous Updates**

Go back and add to their character pages anytime as they learn more about each character.
 Periodically, during reading sessions, prompt them to think about any new insights they might add to their Main Lesson Sketchbooks.

#### **Final Review**

Once the book is finished, have a final review of the character studies.

Reflect on the journey of each character and share how their understanding of the character evolved.

# Vocab Ventures in "The Wild Robot" Unit Study

Welcome to the "Vocab Ventures" section of our "The Wild Robot" unit study, where the enchanting narrative of the book becomes a gateway to expanding your child's vocabulary. This part of the study is devoted to enriching your child's language skills through the exploration of new and interesting words found in Peter Brown's "The Wild Robot."

In "Vocab Ventures," we've carefully selected a range of vocabulary words directly from the story. These words are not only crucial for understanding the book more deeply but are also instrumental in developing your child's language and comprehension skills. This section of the study aims to make vocabulary learning an adventure — engaging, contextual, and fun.

#### **Power of Words**

The goal of "Vocab Ventures" is to transform vocabulary building from a routine exercise into an exciting exploration of language. It's about instilling a love for words and their power, encouraging your child to become not just a reader, but a thoughtful communicator.

#### **Grow Your Language Bank**

As your family progresses through "The Wild Robot," we invite you to delve into these vocabulary adventures. The words your child learns here will not only aid their understanding of the book but will also become valuable additions to their growing language bank. We're excited to see how these "Vocab Ventures" will enhance your child's reading experience and support their overall language development.

Vocab Ventures: Vocabulary Studies

### **Understanding Vocab Ventures:**

We have provided a comprehensive list of vocabulary words from "The Wild Robot," complete with page numbers and definitions. These words have been carefully chosen to enhance your child's language skills and comprehension of the story. Of course, every child's current vocabulary is different so please pick and choose the words that best suit your family.

Below are a selection of ways you can integrate these words into your studies!

Fun Ways to Engage with Words:

**Word-of-the-Day:** Make each word an exploration. Use it in daily conversations, encouraging your child to do the same.

**Creative Storytelling:** Have your child create stories or drawings that incorporate the vocabulary words, connecting them creatively to the themes of the book.

**Vocabulary Flashcards:** Create flashcards for a fun, interactive way to review and remember the words. Double up your flashcards and play games of memory; win a pair only if you can use the word in a sentence!

**Vocabulary Games:** Turn learning into play. Double up your flashcards and play games of memory; win a pair only if you can use the word in a sentence!

**Art and Vocabulary:** Encourage your child to draw or craft something that represents a chosen word, combining artistic expression with language learning.

Integrating into Reading Sessions:

**Spot the Word:** As you read the book together, have your child identify words they do not know in the text. Discuss how they are used in the context of the story and together figure out that possible meaning.

**Journaling:** Encourage your child to use the vocabulary words in their Main Lesson Book entries, whether in writing summaries, reflections, character studies or creative pieces.

# The Role of Parents:

- 1. Your involvement is key. Discuss the words with your child, use them in your conversations, and show excitement about discovering new words together.
- 2. The goal of Vocab Ventures is not just to memorize words but to understand and use them effectively. It's about enriching your child's language skills in a way that's engaging and directly connected to their reading experience.

# Vocab Ventures: Vocabulary Studies Ch 1-20

Chapter 1	Chapter 2	Chapter 3	Chapter 4
chaos thrash skitter horizon	cautious	unit automatic	absorb identify restrain
Chapter 5 emerge engulf instinct linger lush	Chapter 6 scuttle methodical technique	Chapter 7 underbrush	Chapter 8
Chapter 9 dense outcrop survey sheer teem unison artificial	Chapter 10 activate	Chapter 11  illuminate chorus conserve nonessential	Chapter 12  perch whisk frantic plunge
Chapter 13 debris submerge refuge recede lurk	Chapter 14 massive	Chapter 15 frenzy lumber	Chapter 16 resin
Chapter 17 rigorous peculiar camouflage	Chapter 18  nestle observe	Chapter 19 scud intricate beckon	Chapter 20

# Vocab Ventures: Vocabulary Studies Ch 21-40

Chapter 21	Chapter 22	Chapter 23	Chapter 24
bulge	prowl	numb agony	plummet pulverize
Chapter 25	Chapter 26 peer	Chapter 27	Chapter 28
sensitive sigh	pounce defend mimic triumphant strategy demeanor	surround	pamper gruff
Chapter 29 constant insist	Chapter 30 level astonished ignite	Chapter 31	Chapter 32
Chapter 33 burrow fertilize	Chapter 34 graze meander	Chapter 35 escort	Chapter 36 incident lurch tranquil
Chapter 37	Chapter 38	Chapter 39 inhabit hover gaggle veer	Chapter 40 fanatic vessel

# Vocab Ventures: Vocabulary Studies Ch 41-60

Chapter 41	Chapter 42	Chapter 43	Chapter 44
investigate dreary ordit	sweltering abandon	sprint	
Chapter 45	Chapter 46	Chapter 47	Chapter 48
loom hoist negotiate	stupor wilt	procession	consult nimble
Chapter 49	Chapter 50	Chapter 51	Chapter 52
updraft		hibernate migratory	
Chapter 53	Chapter 54	Chapter 55	Chapter 56
nuzzle	thaw trudge lattice	keen propose	frigid
Chapter 57	Chapter 58	Chapter 59	Chapter 60
eerie hesitate	harmonious pity debt scavenge	nourish	nuisance remedy

84

# Vocab Ventures: Vocabulary Studies Ch 61-80

Chapter 61	Chapter 62	Chapter 63	Chapter 64
romp		lurch mingle	forge
Chapter 65	Chapter 66	Chapter 67	Chapter 68
generation			
Chapter 69	Chapter 70	Chapter 71	Chapter 72
refurbish resistance indefinite foliage	intrude	coordinate bombard squelch	billow roil clamber
Chapter 73 taut malfunction	Chapter 74	Chapter 75	Chapter 76 mangled
Chapter 77 stark din	Chapter 78	Chapter 79	Chapter 80 glitch defective

# Vocab Ventures: Vocabulary Studies

#### Chapters 1-8

chaos: complete confusion and disorder

And in the middle of the chaos, a cargo ship was sinking. pg. 1

thrash: to beat very hard

But as the hurricane thrashed and swirled and knocked them around, the crates also began sinking into the depths. pg. 1

**skitter** :to glide and skip lightly or quickly *A robot foot skittered into the waves. pg.2* 

**horizon**: the line where the earth or sea seems to meet the sky *And then a smudge of green appeared on the horizon. pg. 2* 

cautious :showing or using care to avoid trouble or dangerSo they cautiously crept over the rocks to take a closer look. pg. 5

unit :a single thing, person, or group that is a part of something larger"Hello, I am ROZZUM unit 7134, but you may call me Roz." pg. 7

**automatic**: having controls that allow something to work or happen without being directly controlled by a person

And then, still packed in her crate, she automatically started to speak. pg. 7

absorb: to take in or swallow up

The robot felt her body absorbing the sun's energy. pg.8

identify: to find out or show the identity of

So her computer brain went to work and she identified the light. pg. 8

restrain: to keep from doing something

She tried to move her arms, but they were restrained by cords. pg.8

emerge: to come out or into view

They watched as a sparkling monster emerged from the crate. pg. 10

**linger**: to continue to exist as time passes

Roz watched the otters go, but her eyes lingered on the sparkling objects that littered the shore. pg. 10

engulf to flow over and cover or surround

And then a gigantic wave crashed over the rocks and engulfed the entire gravesite. pg. 11

instinct: a way of behaving, thinking, or feeling that is not learned: a natural desire or tendency that makes you want to act in a particular wayRoz could feel her Survival Instincts. pg. 11

**lush** :covered with a thick growth of healthy plants *It looked lush and safe up there. pg. 12* 

scuttle :to run rapidly from view

And she was just about to get another ding when a crab scuttled out from under a piece of driftwood. pg.13

**methodical**: done or arranged in a planned way: using a careful and orderly procedure *Up and up and up she went, methodically climbing past nests and ledges and tiny trees rooted in the cracks.* pg.14

**technique**: a way of doing something using special knowledge or skill So Roz decided to try out his climbing technique. pg 14

**underbrush**: shrubs and small trees growing among large trees *Chirps and wingbeats and rustlings in the underbrush. pg 16* 

#### Chapters 9-15

dense: having its parts crowded together: THICK

Dense forest and rocky outcrops forced the robot to zig and zag and backtrack. pg.21

**outcrop**: the part of a rock formation that appears at the surface of the ground
Dense forest and rocky outcrops forced the robot to zig and zag and backtrack. pg.21

survey: to look over: EXAMINE

Roz looked down and surveyed the island. pg.21

sheer: very steep

In some places the mountain fell away, leaving sheer cliffs. Pg.23

teem: to be full of something

The island was teeming with life. pg.23

unison: at the same time

A flock of sparrows turned in perfect unison above the trees. pg.23

artificial: made by humans

Artificial life. pg 23

activate: to start working or cause to start working

She didn't know that she'd been accidentally activated by those curious sea otters. pg.24

illuminate: to supply with light: light up

She activated her headlights and suddenly bright shafts of light were beaming out from her eyes and illuminating the whole mountaintop. pg.25

**chorus**: a sound made by many people or animals at the same time

Then she turned them off and sat in darkness and listened to the chorus of nighttime chirps. pg.25

conserve :to prevent the waste of

After a while, our robot's computer brain decided it was a good time to conserve energy, pg.25

nonessential : not necessary

Her nonessential programs switched off, and then, in her own way, the robot slept. pg.25

perch: to sit or rest on a raised seat or position

So she spent the next few days and nights perched on the peak. pg.26

whisk: to move suddenly and quickly

The river of mud whisked her downhill, slamming her into rocks and dragging her through bushes and sweeping her straight toward a cliff! Pg.28

**frantic**: feeling or showing a lot of fear and worry

Roz frantically clawed at the ground, grasping for anything she could hold on to, but the flow only carried her faster. pg.28

**plunge :**to drop suddenly downward or forward and downward *And just as she was about to plunge over the side, she came to a hard, sudden stop. pg.28* 

**debris**: the junk or pieces left from something broken down or destroyed *Giant mounds of mud and debris had formed below the cliffs. pg.30* 

submerge: to put under or plunge into water

Others were submerged, their upper branches barely poking above the floodwaters. pg.30

refuge: shelter or protection from danger or distress

Lowland creatures, who had sought refuge on higher ground, were waiting patiently for the water to recede. pg.31

recede: to become smaller or weaker

Lowland creatures, who had sought refuge on higher ground, were waiting patiently for the water to recede. pg.31

lurk: to be in a hidden place

She stomped across the hillside and up to the cave, but never stopped to wonder what might be lurking within. pg.31

massive :very large, heavy, and solid

A massive head rammed into her chest. pg.34

frenzy: great and often wild or uncontrolled activity

Each pinecone bounced off its target with annoying accuracy and whipped the young bears into a frenzy.pg.35

**lumber**: to move in a slow or awkward way

But before lumbering home, they glared up at Roz and snorted one last time. pg.37

#### Chapters 16-25

**resin**: a yellowish or brownish substance obtained from the gum or sap of some trees (as the pine) and used in varnishes and medicine

The tree's sticky resin will find you. pg.38

rigorous: done carefully and with a lot of attention to detail

She was about to get up and give herself a rigorous cleaning when she noticed a peculiar twig. pg.40

peculiar: different from the usual

She was about to get up and give herself a rigorous cleaning when she noticed a peculiar twig. pg.40

camouflage: to hide or disguise by covering or making harder to see

"Hello, stick insect, my name is Roz. You are very well camouflaged." pg.41

nestle: to lie close and snug

She waited for darkness, and then she padded to the center of a clearing, nestled herself between some rocks, and became part of the landscape. pg.43

observe :to watch carefully

And so Roz sat there, right in the open yet completely unseen, and observed the wilderness around her. pg.44

scud: to move or go quickly

Clouds scudded through the sky. pg.45

intricate: having many parts; complicated and detailed

Spiders spun intricate webs. pg.45

**beckon**: to appear attractive or inviting

Berries beckoned to hungry mouths. pg.45

bulge: to swell, curve outward, or stick out

The crowd stared in disbelief as the grass lump started shaking and bulging upward and crumbling apart, and there was the robot! pg.50

**prowl**: an act of moving through a place while searching for something

"I don't think I'll ever feel comfortable knowing that Roz is on the prowl." pg.53

numb: unable to feel anything in a particular part of your body because of cold, injury, etc.

"My face is numb." pg.55

agony: great physical pain or emotional distress

The fox winced in pain and said through his teeth, "Please, Roz, pull them out faster. This is agony!" pg.55

plummet: to fall straight down

Down went the robot, plummeting into the treetops below. pg.58

pulverize: to beat or grind into a powder or dust

The ground was littered with broken rocks and splintered wood and pulverized shrubs. pg.58

sensitive :able to sense very small changes in something

As Roz stood in the rain, staring down at those poor, lifeless geese, her sensitive ears detected a faint peeping sound coming from nearby. pg.59

**sigh**: to take in and let out a long, loud breath in a way that shows you are bored, disappointed, relieved, etc.

The fox sighed. pg.61

mimic :to imitate closely; to act like

You are a marsupial, and are nocturnal, and are known for mimicking the appearance and smell of dead animals when threatened" pg. 66

#### Chapters 26-37

**peer**: to look curiously or carefully

Roz peered down from the branches and saw weeds rustling in the moonlight. Pg.63

**pounce** :to suddenly jump toward and seize something with or as if with claws

But when the badger pounced, this creature just rolled onto her back, stuck out her tongue, and died.

pg.64

**defend**: to protect from danger or attack

You might expect a creature under attack to run for her life, or to defend herself, or at the very least to scream. pg.64

**mimic**: to imitate very closely

"You are a marsupial, and are nocturnal, and are known for mimicking the appearance and smell of dead animals when threatened." pg. 66

**triumphant** :celebrating victory of success

The opossum went on and on about her various acting methods and her triumphant performances, and our robot absorbed every word. pg.66

**strategy**: a carefully developed plan or method for achieving a goal or the skill in developing and undertaking such a plan or method

Performing could be a survival strategy! pg.67

demeanor :outward manner or behavior

Roz's friendly demeanor needed some work, but it was a start. pg.67

surround :to enclose on all sides : ENCIRCLE

He lay quietly in his nest with his eyes closed, surrounded by chips of broken shell. pg.69

**pamper**: to treat (someone or something) with great care and attention "But don't pamper him too much." pg.75

gruff :rough in speech or manner
"He's a little gruff at times." pg.77

constant :remaining steady and unchanged

Proof that the beavers needed a constant supply of wood. Pg.79

insist : to make a demand

"I'm afraid I must insist!" said Mr. Beaver. pg.80

**level** :having a flat even surface

"And you can smooth down this patch of dirt so we have a level place to build." pg.86

astonished :feeling or showing great surprise or wonder

But what most astonished Mr. Beaver was that Roz and Brightbill were huddled around a small crackling campfire. pg. 86

**ignite** :to set on fire : LIGHT

"I directed sparks onto dry leaves and wood until they ignited." pg.86

burrow: to proceed by or as if by digging

She asked her burrowing friends, the moles and the groundhogs, to dig through the dirt and loosen the soil. pg.93

**fertilize** :to make (soil, land, etc.) richer and better able to support plant growth by adding chemicals or a natural substance (such as manure)

Once the grounds were fertilized, it was time for the plants. Pg.94

meander: to walk slowly without a specific goal, purpose, or direction

Together they loved meandering along the forest paths and around the banks of the pond. pg.96

graze :to eat grass

"Oh Roz, you've been busy!" said Tawny as her family grazed on the wonderland of growing things. pg.98

escort :to accompany someone to protect or show courtesy

Loudwing escorted Brightbill back to the beach, and a minute later the gosling was in his mother's arms, safe and sound. pg.105

**incident** :an often unimportant happening that may form a part of a larger event *Brightbill soon forgot about the incident with Rockmouth. pg.106* 

lurch :to move with a sudden swaying, tipping, or jerking motion
Her body lurched forward and then backward, again and again, as she struggled to make a decision.
pg.104

**tranquil**: free from disturbance or turmoil

One moment everything was tranquil. Pg.104

Chapter 38-53

inhabit :to live or dwell in

Other parts were gritty with sand, or were tangled in seaweed, or were inhabited by small, scuttling creatures. pg.113

**hover** :to fly or float in the air without moving far in any direction

He hovered there for a second, rising a little higher than before, and then he sailed backward into the soft grass again. pg.114

gaggle: a group of animals and especially a flock of geese

Each morning, a gaggle of them would wait on the water for Brightbill to lead them into the sky. pg.115

veer :to change direction

He wiggled his tail feathers and felt himself veering back and forth. pg.115

fanatic :a very enthusiastic supporter or admirer

Brightbill was a flying fanatic, and his favorite place to fly was up on the grassy ridge. pg.117

**vessel**: a craft larger than a rowboat for navigation of the water "A ship is a large vessel used for ocean transport." pg.118

**investigate** :to study by close examination and questioning *They investigated the island's sandy southern point. pg. 119* 

dreary :dull and depressing

On dreary summer days, they would stay inside. pg.119

**orbit**: to travel around (something, such as a planet or moon) in a curved path: to make an orbit around (something)

"A planet is a celestial body orbiting a star." pg.121

**sweltering** :oppressively hot

It was a sweltering afternoon, and the heat had put everyone in a bad mood. pg.123

**abandon**: to leave and never return to: give up completely "Some lay eggs and immediately abandon them." pg.125

sprint :to run at top speed especially for a short distanceWithout thinking, he sprinted toward the pond, beat his wings, and flew away. pg.129

**loom**: to come into sight suddenly and often with a large, strange, or frightening appearance *They were standing on the rocky shore with the cliffs looming behind them. pg.133* 

**hoist**: to lift up especially with a pulley

Until she hoisted herself onto the clifftop where two young bears were waiting. pg.138

negotiate :to be successful in getting around, through, or over

Up she went, expertly negotiating rocky columns and ledges. Pg.138

**stupor**: a condition of being not alert or able to think normally

Mother Bear's howl was so startling that it snapped Brightball right out of his stupor.pg.142

wilt :to lose strength

Mother Bear's howl slowly faded, and she wilted to the ground.pg.142

**procession** :an organized group or line of people or vehicles that move together slowly as part of a ceremony

They made quite a grant procession, all walking together like that. Pg.147

consult :to seek the opinion or advice of

"I might have to consult a few friends." pg.150

nimble :quick and light in motion : AGILE

You might already know this, reader, but raccoons have very nimble hands. pg. 152

**updraft** :an upward movement of air

"So I found an updraft and we spent the afternoon circling around and around and hardly flapped our wings at all!" pg.156

**hibernate**: to spend the winter sleeping or resting

Many of the island animals were already thinking about their winter hibernation. pg.162

migratory :moving from one place to another

But the migratory birds were preparing for the long journey south to their warm wintering grounds. pg.163

nuzzle :to push or rub with the nose

"I'm going to miss you," said Brightbill as he nuzzled his mother. pg.169

Chapter 54-68

thaw :to stop being frozen or to cause (something) to stop being frozen

The robot's sensors began to thaw, and when she was ready, she climbed through the hole in the roof and into a bright, foreign landscape. pg.173

trudge: to walk or march steadily and usually with much effort

Faint wisps of steam curled up from the robot's body as she trudged through the forest. pg.175

**lattice**: a frame or structure made of crossed wood or metal strips

She patched up the hole in the dome with a latticework of branches before adding a layer of mud and leaves, and soon the repairs were complete. pg.176

keen: full of enthusiasm; eager

And then the robot's keen hearing picked up another sound, pg.177

**propose**: to make a suggestion to be thought over and talked about: SUGGEST

"I propose a truce," said Roz. pg.179

**frigid**: freezing cold

He was a towering hulk of an animal and had a thick coat of fur, but even he was struggling with the frigid temperatures. pg.181

eerie :causing fear and uneasiness ; strange

There was an eerie glow in that part of the forest, and a thick plume of smoke began rising up from the snowy treetops. pg.185

**hesitate**: to pause before doing something

Roz didn't hesitate. pg.186

harmonious :not experiencing disagreement or fighting

Thanks to Roz's truce, life around the Nest was mostly harmonious. pg.188

pity: a feeling of sadness or sympathy for the suffering or unhappiness of others

"I don't want your pity." pg.189

debt :something owed to another

"I'll repay my debt to you if it's the last thing I do." pg. 190

**scavenge**: to collect usable things from what has been discarded

"We raccoons are meant to scavenge." pg.192

**nourish**: to cause to grow or live in a healthy state especially by providing with enough good food or nutrients

You see, those poor dead creatures returned to the earth, their bodies nourished the soil, and they helped create the most dazzling spring bloom the island had ever known. pg.195

**nuisance** :an annoying or troublesome person, thing, or situation "You've always been a nuisance, but this time you've gone too far!" pg.196

**remedy**: to provide or serve as a cure or solution for *The situation had to be remedied. pg.198* 

**romp**: to play in a rough and noisy way *She romped with weasels. pg.200* 

lurch :to move with a sudden swaying, tipping, or jerking motion
"Everything was going smoothly until the saw suddenly lurched forward and sliced right through three
of the robot's fingers!" pg.207

**mingle** :to move around during a party, meeting, etc., and talk informally with different people "We began to mingle with the other flocks." pg.211

**forge** :to bring into existence

But she mostly spoke of all the new friendships she had forged. Pg.212

**generation**: a group of people born and living during the same time "A new generation of youngsters is arriving." pg.214

Chapters 69-80

**refurbish**: to repair and make improvements to (something, such as a building)
"We will return you to the factory, where the Makers will refurbish you and sell you to a work site."
pg.227

**resistance** : an act or instance of opposing

"Any further resistance will be proof of defectiveness, and we will deactivate you." pg.227

indefinite :not certain in amount or length

"You will then live on that work site indefinitely." pg.227

foliage: the leaves of a plant or of many plants

The RECOs peered past Roz, toward the mysterious noises, but saw only foliage. Pq. 229

intrude :to come or go in without an invitation or right

He had once shut down his own mother with a click, and now he would do the same thing to the intruders. pg.230

**coordinate** :to work or cause to work together smoothly

He didn't know it but he was in the midst of a coordinated assault. pg.232

bombard :to hit or attack again and again

"Begin the bombardment!" ordered Swooper. pg.233

**squelch** :to splash through water, slush, or mire

With one final crack the head broke loose, soared through the air, and squelched into the muck. pg.235

**billow**: to move as a large cloud or mass

The avalanche slowed and settled as a cloud of dust billowed out from the cave, pg.237

roil: to move in a violent and confused way

Soon, the robot was the standing beside the roiling, frothing river, just above the falls. pg.238

**clamber**: to climb in an awkward way (as by scrambling)

She rolled through the rapids, crashed into one rock and then desperately clambered onto another. *Pg.239* 

taut: Very tense

He was pelted with flaming pinecones, and tripped by taut vines. Pg.245

**malfunction**: to fail to function or work properly

Was RECO 1's sensor malfunctioning? pg.248

mangled :severely injured or damaged by cutting, tearing, or crushing

Roz was a mangled wreck, and there was nothing they could do to fix her. pg.257

stark :clear and harsh

There were stark differences of opinion. pg.260

din :loud confused noise

"I hear you!" The robot's voice cut through the din. pg.262

glitch :a minor problem with a machine or device (such as a computer)

Maybe Roz really was defective, and some glitch in her programming had caused her to accidentally become a wild robot. pg.268

**defective** : having a defect or flaw

"Any further resistance will be proof of defectiveness, and we will deactivate you." pg. 268

# Beyond the Book in "The Wild Robot" Unit Study

As part of our enriching journey through "The Wild Robot," we introduce you to the "Beyond the Book" section of our unit study. This segment is specially crafted to extend your child's learning experience beyond the pages of Peter Brown's captivating tale. Here, we explore a wider range of resources, activities, and materials that complement the themes and lessons found in "The Wild Robot."

#### **Engage with the Content**

"Beyond the Book" offers an array of extension activities and resources. From nature exploration guides that encourage outdoor adventures to thought-provoking documentaries about robotics and wildlife, each resource is selected to enrich your child's understanding and curiosity. We provide suggestions for projects, field trips, and experiential learning opportunities that align with the story's themes, enabling your child to engage with the content in a hands-on and meaningful way.

# **Invitation to Explore**

This section of the study is not just an extension of learning; it's an invitation to explore, to question, and to connect with a world of knowledge that parallels the adventures of Roz. It's about fostering a love for learning that goes beyond the conventional classroom setting, encouraging your child to see the interconnectedness of stories, real-world phenomena, and their own experiences.

We encourage you and your child to delve into these resources, to let them spark new ideas, discussions, and discoveries. "Beyond the Book" is your gateway to turning the story of "The Wild Robot" into a comprehensive, multifaceted educational adventure.

Beyond the Book: Extension Learning Opportunities

This Book Study has provided you with a series of foundational activities to bring this book to life, but

there are so many ways to dive deeper into this story if you'd like to continue the learning for your family.

We've compiled a list of extension learning opportunities for you to consider. Our recommendation would

be to choose those that either align with your current educational goals or your child's interest. Have fun!

**Animal Behavior and Ecology:** 

Since Roz interacts with various animals, this is a great opportunity to learn more about your local

wildlife, their habitats, ecological systems and how you interact with them.

**Artificial Intelligence:** 

Discuss how robots like Roz could think and make decisions. This can lead to broader discussions about

AI in our world.

**Environmental Conservation:** 

The book's island setting can spark discussions on environmental protection, conservation efforts, and

sustainability.

**Engineering and Design:** 

Delve into basic engineering concepts by exploring how robots are designed and built. This could include

simple robotics projects or design challenges.

**Human and Robot Interaction:** 

Explore how humans and robots could coexist and assist each other in the future.

**Survival Skills:** 

Inspired by Roz's survival story, you can study basic survival skills, outdoor safety, and wilderness first

aid.

**Storytelling and Creative Writing:** 

Encourage the kids to write their own stories about robots, animals, or nature, drawing inspiration from

Roz's adventures.

Philosophy and Sentience:

Introduce basic philosophical questions about what it means to be alive or have consciousness, using Roz

as an example.

# **Adaptation and Evolution:**

Look into how animals (and robots like Roz) adapt to their environments.

#### Geography and Map Skills:

Use the island setting to teach basic geography, map reading, and navigation skills. Look into how islands are formed.

#### **Renewable Energy:**

Discuss how Roz is powered and the role of renewable energy sources like solar power.

# **Teamwork and Community Building:**

Focus on how Roz and the animals work together, highlighting the importance of teamwork and community.

# **Empathy and Emotions:**

Talk about understanding and relating to others' feelings, drawing on Roz's interactions with the island's inhabitants.

#### The Human Body:

Study the human brain and nervous system; comparing its capabilities to the current limitations of robots.

#### **Space Exploration and Robotics:**

Discuss how robots are used in space exploration, like the Mars rovers.

Each of these topics not only builds on the themes and subjects in "The Wild Robot" but also opens up new avenues for learning and discussion, catering to a wide range of interests, ages and educational goals.

Beyond the Book: Helping Your Child Build a "Robot" with an Electricity Kit

Encourage Your Child's Inner Engineer with a Simple Electricity Kit!

**Introduction:** Introducing your child to the basics of circuits and electricity can be a fun and educational experience. While the end result may not be a programmable robot in the strictest sense, building a mock "robot" that moves or lights up can be a delightful and informative activity. Here's how you can guide them!

#### **Materials:**

Electricity Kit Components: (kit recommendation here)

Batteries: Typically AA or AAA batteries, depending on the kit.

Wires: Conductive wires for making connections.

Light Bulbs (LEDs): For creating light-up features.

Motor: A small electric motor to enable movement.

Switch: To turn the circuit on and off.

**Basic Construction Materials:** 

Cardboard: For the body of the robot.

Plastic Containers: Can be used for additional structure or design.

Tape: Electrical tape and/or duct tape for securing components.

Glue: Strong adhesive suitable for sticking electronic components to the robot body.

**Decorative Materials:** 

Markers, Paints, Stickers: For personalizing and decorating the robot.

Craft Supplies: Googly eyes, pipe cleaners, colored paper, etc., for added creativity.

Tools:

Scissors: For cutting cardboard, tape, and wires.

Screwdriver: If needed for opening battery compartments or adjusting components.

Wire Stripper/Cutter: If the wires need to be stripped or cut to length.

Optional Extras:

Wheels: If the robot is designed to move.

Propellers or Gears: For additional moving parts.

Additional Sensors or Lights: Depending on the sophistication of the kit and the age/interest of the child.

Remember, the complexity of the materials can vary based on the age and skill level of the child.

# Directions:

**Step 1: Unpacking the Kit:** Start by helping your child unpack the kit. Lay out the components like wires, batteries, bulbs, and motors. It's a great opportunity to familiarize them with each part.

**Step 2: Emphasize Safety:** Safety is paramount. Guide them in handling batteries and wires, and supervise them to ensure they're exploring safely.

**Step 3: Basic Circuit Building:** Teach them how to connect a simple circuit. Linking the wires from the battery to a bulb or motor and seeing it activate is a foundational step in understanding electrical circuits.

**Step 4: Constructing the "Robot":** Assist your child in attaching the circuit to a makeshift body made from household items like cardboard or plastic containers. This gives their circuit a "robotic" form and can be a great exercise in creativity.

**Step 5: Adding Movement or Light:** If the kit includes a motor, help them attach elements that enable movement, like wheels or propellers. For bulbs, find interesting places to put them, such as the "robot's" eyes.

**Step 6: Personalizing the Creation:** Encourage your child to decorate their "robot." This not only makes the activity more enjoyable but also allows them to express their creativity.

**Step 7: Presentation and Explanation:** Once their creation is complete, have them explain it to the family or friends. Encourage them to describe how they built the circuit and the function of their "robot."

**Step 8: Experimentation and Learning:** Guide them in experimenting with different configurations. What happens if they change the number of bulbs or the battery size? These trials are great for learning and discovery.

Beyond the Book: Field Trips

A study of "The Wild Robot" by Peter Brown offers many opportunities for enriching field trips that

complement the themes and settings of the book. Here are some suggestions:

**Botanical Garden or Arboretum** 

Exploring a botanical garden can help children understand the diversity of plant life and ecosystems,

similar to the natural settings Roz encounters.

Wildlife Refuge or Sanctuary

Visiting a wildlife refuge provides insights into animal behavior and habitats, mirroring Roz's interactions

with the animals on the island.

**Robotics Workshop or Science Museum** 

A trip to a place that showcases robotics or a science museum with a robotics exhibit can give children a

closer look at the technology behind robots like Roz.

Hiking in a Nature Reserve or Park

A hike through a local nature reserve or park can simulate the experience of exploring an unknown

natural environment, much like Roz does.

**Environmental Conservation Center** 

Such a center can offer lessons on environmental conservation, tying into the themes of nature and

technology coexisting harmoniously.

Art Museum or Gallery with a Focus on Technology in Art

An art museum or gallery that features technological art can provide a different perspective on how

technology and art can intersect.

**Local Farm or Community Garden** 

Visiting a farm or community garden can help children understand the relationship between humans,

technology, and the natural world.

# **Beach or Coastal Cleanup Activity**

Participating in a beach cleanup can provide practical experience with environmental stewardship, reflecting the book's themes of caring for nature.

#### **Observatory or Planetarium**

A visit to an observatory or planetarium can expand on the book's themes by exploring the broader universe and our place in it.

# Library or Bookshop for a Meet-the-Author Event

If possible, attending a book reading or a meet-the-author event with Peter Brown could provide deeper insights into the story and its themes.

Each of these field trips can provide practical, hands-on experiences that enrich the understanding of the book's themes, such as the interaction between technology and nature, adaptation, and survival in different environments.

# Beyond the Book: The Wild Robot Resources FREE

Here are a variety of free resources that I have found and used with our Wild Robot Studies.

1. Let's Draw: learn to draw Roz and friends \*this is fun to tie into their character studies and also just free artwork in their Main Lesson Books

https://www.teacherspayteachers.com/Product/Lets-Draw-Directed-Drawing-Roz-from-The-Wild-Robot =4513146

- 2. Charting the Story Printable \* tie into character studies or use alongside discussions about animals that help one another in nature! You can always fold and glue into your Main Lesson Book.

  <a href="https://bookunitsteacher.com/reading\_wildrobot/animals.pdf">https://bookunitsteacher.com/reading\_wildrobot/animals.pdf</a>
- 3. Chapter Questions with Answers \*use these for a fun game of The Wild Robot trivia! <a href="https://www.pps.net/cms/lib/OR01913224/Centricity/Domain/338/The%20Wild%20Robot.pdf">https://www.pps.net/cms/lib/OR01913224/Centricity/Domain/338/The%20Wild%20Robot.pdf</a>

# Beyond the Book: Chapter Book Recommendations

Here are several books that would complement The Wild Robot by Peter Brown, each offering unique perspectives on themes like nature, technology, survival, friendship, and adventure. These are books you might choose to read next, or ones that your child could read independently alongside this study (reading level and age dependent of course).

# "Hatchet" by Gary Paulsen

This is a survival story about a boy who learns to live in the wilderness after a plane crash. It pairs well with "The Wild Robot" in terms of survival themes and adapting to nature.

# "Charlotte's Web" by E.B. White

A classic tale of friendship and life on a farm, this book explores themes of friendship and compassion, much like Roz's relationships with the animals.

# "The One and Only Ivan" by Katherine Applegate

This story, told from the perspective of a gorilla living in a mall, touches on themes of nature vs. artificial environments and the importance of finding one's true place in the world.

#### "My Side of the Mountain" by Jean Craighead George

A story about a boy who leaves home to live in the wilderness. It explores themes of self-sufficiency and living in harmony with nature.

#### "The Invention of Hugo Cabret" by Brian Selznick

Blending magic, machinery, and mystery, this book complements the technological aspects of "The Wild Robot" while offering a captivating story.

#### "The Iron Giant" by Ted Hughes

A story about a giant metal robot and a young boy, exploring themes of friendship, fear, and the unknown, much like Roz's journey.

# "Stuart Little" by E.B. White

This book about a small mouse in a big world can be a good parallel to Roz's experience as an outsider trying to find her place.

# "The Tale of Despereaux" by Kate DiCamillo

A story about a brave mouse with big ears, touching on themes of courage, hope, and being different.

# "Island of the Blue Dolphins" by Scott O'Dell

This novel follows a young girl's survival story on an island, resonating with themes of solitude, survival, and resilience.

### "Winnie-the-Pooh" by A.A. Milne

While more whimsical, this collection of stories about Pooh and his friends in the Hundred Acre Wood shares themes of friendship and adventure.

While these books are popular and educational, it's always advisable for parents to review the content first to ensure it aligns with their educational goals and the children's maturity levels.

# Beyond the Book: Picture Book Recommendations

Here's a list of possible picture books that would beautifully complement your "The Wild Robot" book study. These books have been selected for their themes of nature, robotics, friendship, survival, and adventure, mirroring the elements found in "The Wild Robot".

#### "Roxaboxen" by Alice McLerran

A tale about children who create a whole town from rocks and boxes, emphasizing creativity and imagination.

### "Robot Rumpus" by Sean Taylor

A fun story about the chaos caused by household robots, offering a humorous take on robotics.

# "The Curious Garden" by Peter Brown

Also by Peter Brown, this book tells the story of a boy who helps a garden flourish in a gray city, highlighting themes of nature and perseverance.

#### "Sam & Dave Dig a Hole" by Mac Barnett

A story of adventure and unexpected discoveries, perfect for encouraging exploration and curiosity.

# "Miss Rumphius" by Barbara Cooney

A story about making the world more beautiful, resonating with themes of caring for nature.

#### "The Gardener" by Sarah Stewart

A touching tale of a young girl who brings beauty to her new city home with a rooftop garden, showing how nature can thrive even in unexpected places.

# "Leaf Man" by Lois Ehlert

A beautifully illustrated book about a leaf man blown away by the wind, encouraging exploration and observation of the natural world.

# "Flotsam" by David Wiesner

A wordless picture book about beachside discoveries, sparking imagination and curiosity about the natural world.

# "The Lorax" by Dr. Seuss

A classic tale that teaches the importance of respecting and preserving the environment.

# "Weslandia" by Paul Fleischman

This book follows a boy who creates his own civilization using plants, much like Roz creates her life on the island.

# "Facts vs. Opinions vs. Robots" by Michael Rex

A hilarious conversation about the differences between facts and opinions, and a reminder to listen to one another's opinions and to stand up for the facts.

These books will not only complement the themes explored in "The Wild Robot" but will also enrich your family's reading experience with diverse perspectives and engaging stories. They are perfect for sparking discussions and deepening understanding of the themes in "The Wild Robot."

# Beyond the Books: Daily Jokes and Puns

**Objective:** To incorporate humor and fun into reading sessions of "The Wild Robot," making the experience more enjoyable and memorable for children.

#### Materials

- "The Wild Robot" by Peter Brown
- A whiteboard or a designated wall space for posting jokes
- Dry-erase markers or sticky notes
- A list of robot and nature-themed jokes and puns

#### Structure

- 1. Any day that you will be completing a Wild Robot activity, write a new joke or pun on the whiteboard or post it on the wall.
- 2. Encourage everyone to read it together and share a laugh.
- 3. Briefly discuss how the joke or pun relates to the story or the themes of the book.
- 4. Discuss any new vocabulary words.
- 5. Encourage children to come up with their own jokes or puns related to the story.

# Beyond the Books: Daily Jokes and Puns

List of Jokes and Puns:

What do robots eat for a snack? Micro-chips!

Why was the robot so calm during the storm? It was programmed to keep its cool under pressure!

Why don't bears wear socks? Because they have bare feet!

Why did the robot go camping?

To recharge its batteries in nature!

How does a robot get to sleep? It switches to power-saving mode!

What did the beaver say to the tree?

"It's been nice gnawing you!"

Why don't secrets last long in the forest?

Because the trees will eventually spill the beans!

What's a robot's favorite type of music in the wild? Rock and heavy metal!

Why did the robot go to school in the wilderness? To study natural algorithms!

Why don't squirrels have any friends?

Because they drive everyone nuts!

How does a robot say goodbye to the forest?
"I'll log off now!"

Why do birds fly south for the winter?

Because it's too far to walk!

Why did the robot go to the river?

To stream data!

How do robots keep secrets in the wild?

They use code language!