

#### INTRODUCTION



From DreamWorks Animation comes the eagerly anticipated adaptation of a literary sensation, Peter Brown's beloved, award-winning, #1 New York Times bestseller, *The Wild Robot*. The epic adventure follows the journey of a robot–ROZZUM unit 7134, "Roz" for short – that is shipwrecked on an uninhabited island and must learn to adapt to the harsh surroundings. Roz has been programmed for a modern, futuristic life in the city, yet unaware of her predicament, Roz diligently pursues her primary objective: finding a person with a task she can fulfill. Instead of encountering humans, she meets animals, a realm entirely unfamiliar to her. Undeterred, Roz immerses herself in studying their behavior, eventually learning to connect and communicate with them.



Over time, Roz gradually builds relationships with the animals on the island and accidentally becomes the adoptive parent of an orphaned gosling. Beyond its plot, the story weaves invaluable lessons—emphasizing the importance and value of kindness in adversity, the resilience required for adaptation, the intricacies of parenthood, the emotional navigation of loss, and the experience of using our unique gifts to soar above and beyond all expectations.

#### **About the ACTIVITY BOOK**

This Activity Book is divided into four fun-filled and fascinating exploration lessons, each covering an academic subject using the movie as the spine of the unit. Each daily lesson contains instructions and activities for elementary to teen-aged students so the entire family can prepare for the final fifth day activity: a field trip to a matinee screening on Friday, September 27th to see *The Wild Robot*. These are great activities and lessons for you to do with other families in your local homeschool community.

Blue vocabulary words are located throughout this booklet. On Day 4, older students will define these words based on their context in the written paragraphs. Answer keys for all the lessons are located at the back of this Activity Book.

Now it's time to dive into this Activity Book, and get ready for a fun, educational, robot-filled experience!



### **THE WILD ROBOT FUN ANIMATION FACTS**

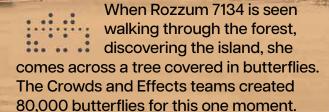




The artists created 47 species of animals for the film.



A total of 269 paintings were created by a team of 15 artists. The average painting took about one week to create!



In the scene when a gaze of raccoons is chasing Roz up a tree, they form a giant ball at the top which is then released by Roz, sending them plunging into the ocean. There are 997 raccoons in the gaze. Did you know that the collective noun for a group of raccoons is a gaze?

Roz has a colored light on her head to indicate different things. Blue means she is talking, booting up, or needs extra light at nighttime. Yellow indicates either a warning or her batteries are running low. And red means danger.



In one of the more complex sequences that takes place in the Lodge, there are 1,434 animals in one scene.



In the Great Migration scene, there are a total of 28,710 geese! Most of them have what are

called "acting feathers" meaning these are the feathers that the animators can control and move. Brightbill, the young goose in the story, has 203 acting feathers. There are 102,838,147 illustrated feathers in the Great Migration!



It took three years and 66 sessions with the cast to record the dialogue for the film. The recording occurred in 7 cities: Glendale, Toronto, Santa Monica, Vancouver, London, Ojai, and New York.

# ROBOT MATCHING CARD GAME



The educational goal of this game is to learn how animal movement in nature has inspired inventors, designers and engineers. For example, the Wright Brothers studied the flight of birds to invent the airplane. This is called **PHYSICAL MIMICRY**. We can use the elegant design of living things to inspire us to make machines that can help us, whether it is airplanes that fly in the sky, boats that glide across the water, or robots that help us do work. These machines mimic animal features to help them move.

Each three-card color group represents an environment, an animal that easily moves in that environment, and a structural feature that helps a robot move in that environment.

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#### You will need:

The cards on the following pages

#### How to play:

Ask a parent to help you print and cut the following pages of cards on cardstock and into individual squares.

Shuffle the cards and deal them to each player until all the cards are dealt. The player with the fewest cards goes first. If all players have the same number of cards, the youngest goes first. Players will take turns asking for colored cards. For example, a player might ask another player, "Do you have a green?" If the player asked has a card of that color, they will give it to the asker (If they have more than one of that color, they will only hand over one card). If the player asked does not have a card of that color, the play moves to the next player. When a player has a complete color set, they will lay that set on the table. The game ends when all the matches are made.

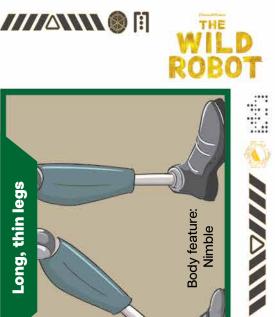
#### How to win:

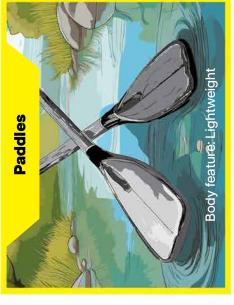
The goal of the game is to collect completed three-card sets. The person who has the most sets wins.

#### Note to parents:

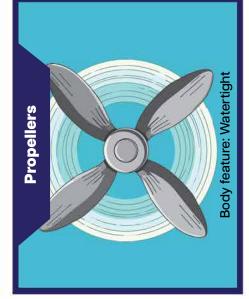
As you play this game, talk with your kids about how it is helpful to study nature to learn more about our world, just as Roz did to eventually help the animals.

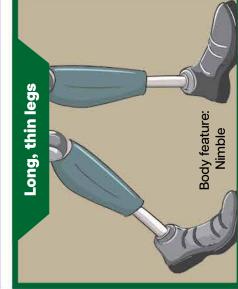
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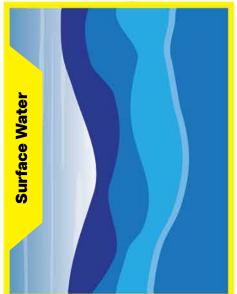




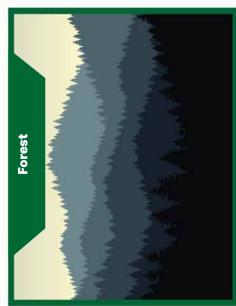








































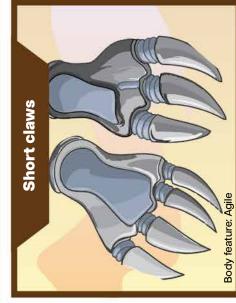
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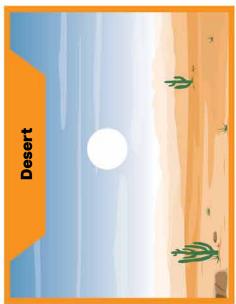


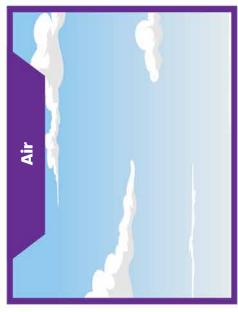


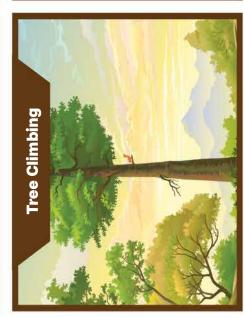






































### **REACH OUT LIKE ROZ**



Because robotics involves non-living material, it is difficult to design machinery that moves the same way living creatures move. One of the challenges in design involves moving joints. To better understand how robotic joints can work, ask a parent to help you make your own robotic arm so you can be just like Roz!

#### You will need:

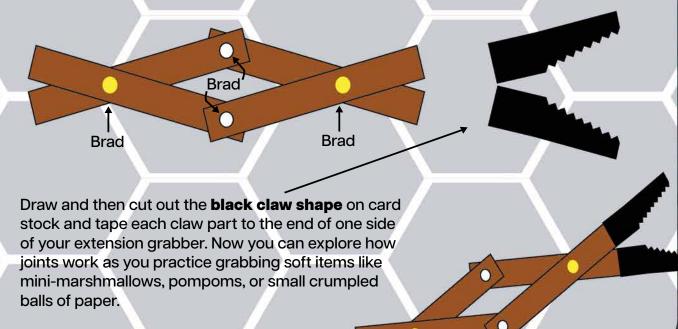
- 4 strips of corrugated cardboard, measuring 11 x 1 ½ inches
- Hole punch
- 4 metal brads
- Cellophane tape

#### Instructions:

For each strip of cardboard, punch a hole 1 inch from one end and a second hole 4 inches from the other end.



Hold two strips together so their holes line up. Place a brad through the two, 4-inch holes. Repeat with the other two strips. You should have two X-shapes. Now line up the 1-inch holes from each end of the X-shapes so it looks like the image below and add a brad to each joint.



### **MIGRATION OF OLYMPIC PROPORTIONS**



**MIGRATION** is the seasonal movement of animals from one part of the world to another. It represents a fascinating process that requires animals to instinctively know their need to travel and use their innate ability to navigate to places they have never been.

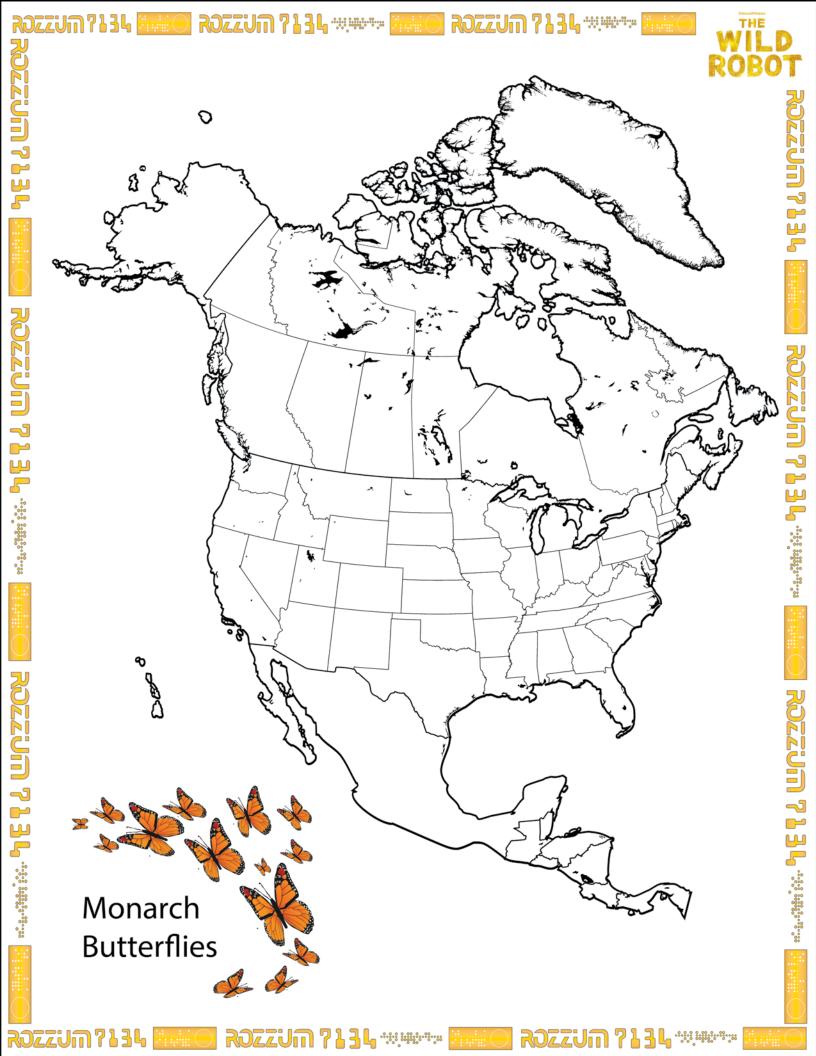
In *The Wild Robot*, there are two stunning depictions of animal migrations. When Roz first explores her new island, she encounters a massive tree that looks as if it is covered by colorful leaves. However, when she reaches out to touch the tree's surface, she is suddenly surrounded by a stunning whirlwind of butterflies. Reds, oranges, and yellows swirl around her as tens of thousands of butterflies make their way into the sky and fly away on their migration route.

Later in the story, Brightbill – the young, orphaned gosling who imprints on Roz – is taught to fly so he can migrate with the other geese on the island as they begin the journey to their winter home.

In this activity, you will explore the migration routes of a specific goose and butterfly species. First, print out the blank maps of North America from the next pages. Then do some research on the migration pathways of snow geese and monarch butterflies. These species annually migrate across North America.

Finally, draw the migration route of each animal on its respective map. In your research, you will discover that the monarch butterfly migration pathway can involve generational travel. That means it takes several generations of butterflies to complete the entire migration loop!





#### **DAY 2: GEOGRAPHY**



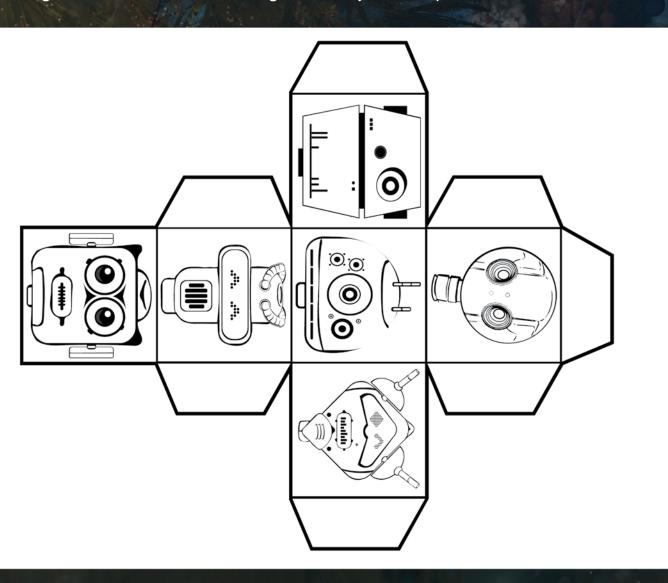
### **MIX AND MATCH ROBOTS**

Robots have different designs that help them serve the purpose they were built for. For example, depending on the ground conditions, some robots will have wheels, while others will have legs. In *The Wild Robot*, Roz had to move different ways to navigate the island terrain. Some robots have bendable arms, while others have straight arms... or no arms at all! In this activity, you can make your robots any way you want by mixing and matching their heads, bodies, and legs.

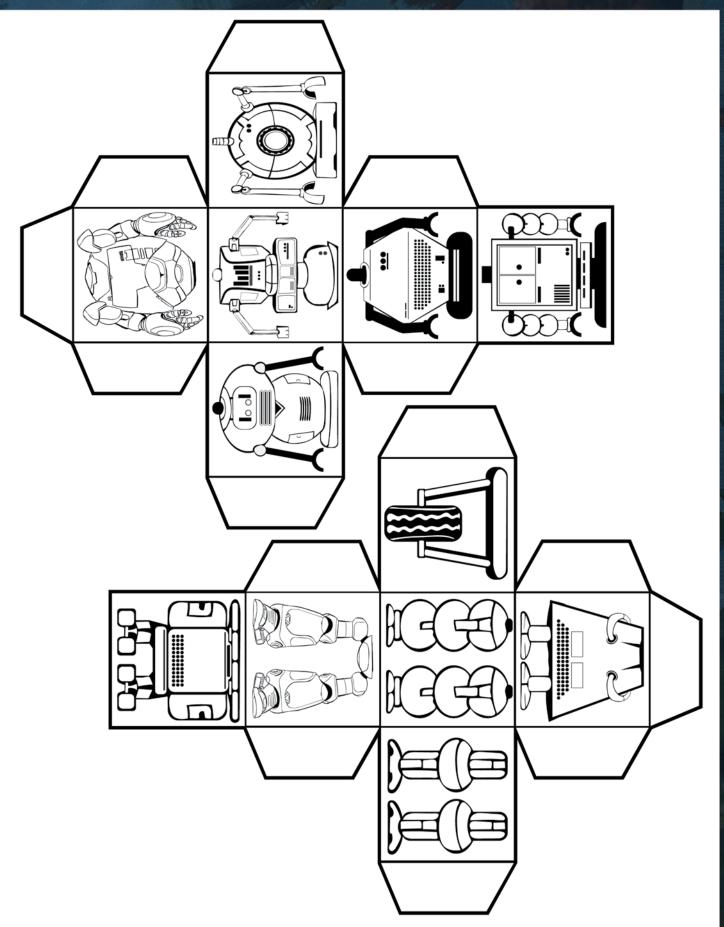
#### You will need:

- Crayons, colored pencils, or markers
- The three cube patterns on this page and the next
- Scissors
- Glue or cellophane tape

Each block contains six different robot designs for heads, bodies, or legs. First, color the robot heads, bodies, and legs with crayons, colored pencils, or markers. Then ask a parent to help you cut the large shapes. Fold along the solid lines between each robot part. Fold tabs inward. Form cubes by gluing tabs to the inside of the cubes. Alternatively, tape could be used. Now you can stack your blocks using different heads, bodies, and legs to create your own special robot!







### **LANDFORM ILLUSTRATIONS**



In *The Wild Robot*, Roz and the animals are on an island. Islands can have various landforms and water features. Animals have a special body design to survive in these many environments. On this page are different descriptions of some landforms. On the next page are illustrations of these features. Ask a parent to help you cut out the illustrations and glue each one in its matching description box.

escription box.		
A place in a river where water spills over a cliff or steep drop.	A strip of land that connects two larger land areas.	A large area of land that is mostly flat.
A low area of land between hills of mountains. Rivers or streams may run through them.	A large elevation of land rising suddenly from the earth's surface.	A large stream of water flowing like a ribbon to the sea or a lake.
An area of land completely surrounded by water.	An extension of land surrounded by water on three sides	An elevation of land shorter that a mountain.
A narrow waterway connecting two larger areas of water.	A mountain or hill with an opening in the earth's surface.	An inland body of water surrounded by land.
An area of land covered by lots of trees.	A huge body of salt water, covering a large part of the earth.	A body of water partly surrounded by land.

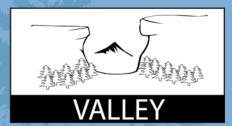
### **ILLUSTRATIONS - LAND & WATER**







































# DRAW YOUR OWN ISLAND



Now that you are familiar with many landforms and water features, draw your own island that has as many of these features as you can. You can give the formations names, too, such as The Chocolate Mountains, or King Nathan's Forest! To take this project even further, you can build your island with building bricks, clay, or salt dough.

### **DAY 3: SOCIAL STUDIES AND HISTORY**



### **Silly Stories**

Fill in the blanks in the following story by asking a family member or friend to give you words that fit the parts of speech below. Don't give them hints to what the story is about. Then read your new silly story!



1. ADJECTIVE 2. NOUN 3. PLURAL NOUN 4. VERB

5. VERB 6. NOUN 7. NOUN 8. ADVERB 9. NOUN

Robots are so cool! They are (1) \_\_\_\_\_\_ machines that humans build.

Although they can do jobs without any help from (2) \_\_\_\_\_\_, robots do what (3) \_\_\_\_\_\_ program them to. But as technology improves, robots are becoming better able to (4) \_\_\_\_\_\_ and (5) \_\_\_\_\_\_ to their surroundings. What if a robot could be your (6) \_\_\_\_\_\_ ? Imagine if a robot could help you with your (7) \_\_\_\_\_\_ schoolwork or could (8) \_\_\_\_\_\_ kick a soccer ball with you. I think it would be fun to have a robot for a (9)



Original story: Robots are so cool! They are metal machines that humans build. Although they can do jobs without any help from people, robots do what scientists program them to. But as technology improves, robots are becoming better able to think and react to their surroundings. What if a robot could be your assistant? Imagine if a robot could help you with your difficult schoolwork or could skillfully kick a soccer ball with you. I think it would be fun to have a robot for a friend!

## **CREATE A ROBOT HISTORY TIMELINE**



Read the information below about the history of robotics. Create a timeline using the outlined page that follows. Use the bold terms to add to the timeline spaces. (Note the blue terms are bold for the timeline spaces, but they also are vocabulary words for a Day 4 activity).

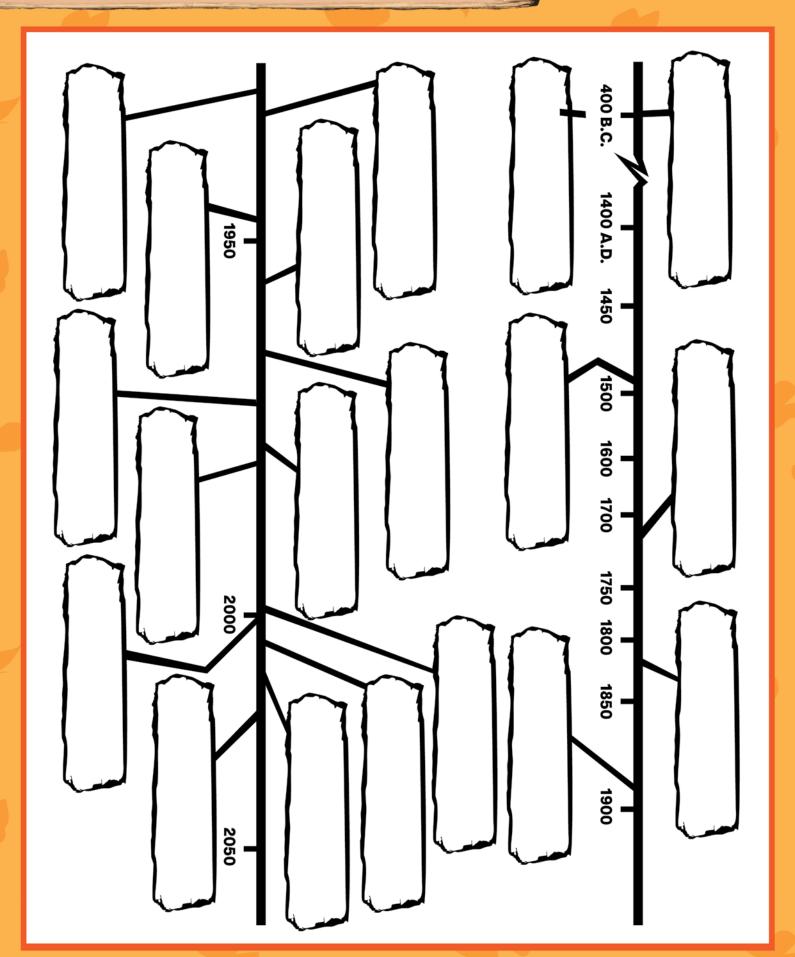
- The history of robots begins in the ancient world. In 400 B.C., The Greek Mathematician **Archytas of Terentum** came up with the idea of a **mechanical bird** that was propelled by steam.<sup>1</sup>
- At the same time, ancient Chinese accounts record an **AUTOMATON** (a self-operating machine) that was given to **King Mu of Zhou**.<sup>2</sup>
- One of the first recorded designs of a **HUMANOID** (human-like) robot was designed by **Leonardo da Vinci** in around 1495.<sup>3</sup>
- In 1738, **Jacques de Vaucanson** built an automaton flute player, a tambourine player, and a robotic machine called the **Digesting Duck**. The duck could flap its wings (which each contained over 400 parts), could eat grain, digest it, and even excrete the digested material.<sup>4</sup>
- In 1810, Dresden, Germany's **Friedrich Kaufmann** built the first humanoid robot: a **trumpet-bearing soldier**.<sup>5</sup>
- In the late-1800s, Japanese inventor **Hisashige Tanaka**, built very complex **mechanical toys** that could serve tea, shoot arrows drawn from a quiver, and even create Japanese writing.<sup>6</sup>
- In 1928, **W. H. Richards** invented a robot named **Eric**. This humanoid robot was exhibited at the Model Engineers Society exhibition in London and could move its hands and head. It was controlled by remote device or voice control.<sup>7</sup>
- **Elektro** was a humanoid robot that appeared at the World's Fair in 1939. It walked by voice command and could speak about 700 words using a record player inside. It could move its head and arms and could even blow up balloons.<sup>8</sup>
- The first electronic, self-controlling robots that exhibited complex behavior were built by **William Walter** in Bristol, England in 1948. Called **Elmer and Elsie**, they were tortoise-like robots that could return to their charging stations when they ran low on power.<sup>9</sup>

### **CREATE A ROBOT HISTORY TIMELINE**



- Robots were useful in industry because they could accomplish repetitive tasks and lift heavy things. The first industrial robot was called **Unimate** and was used in car production at General Motors in 1961. It was a robot arm that was used for lifting and welding.<sup>10</sup>
- The first robot that was able to reason based on cues from its surroundings was **Shakey**. Developed between 1966 and 1972 by the Stanford Research Institute, Shakey combined several sensor inputs such as cameras, laser rangefinders, and bump sensors.<sup>11</sup>
- In 1973, **Wabot 1** was developed in Japan. With arms, legs, and a vision system, Wabot 1 could walk, pick things up, and even talk using prerecorded responses to given statements. But it was not efficient, and scientists realized that it was easier to design robots to perform a single task at a time.<sup>12</sup>
- In 1981, the first industrial robots were able to see. A system called **Consight** used three separate robots that used visual sensors to pick out and sort auto parts.<sup>13</sup>
- In 1995, **David Barrett** built **RoboTuna**. RoboTuna was a biomimetic robot, copying the natural design of a fish swimming in water.<sup>14</sup>
- In 1999, Sony created **Aibo**, a robotic dog that could interact with people.<sup>5</sup>
- Honda introduced **ASIMO** in 2000. This humanoid robot can run, walk, communicate, recognize faces, and interact with its surrounding environment.<sup>5</sup>
- A robotic vacuum cleaner, **Roomba**, was released in 2002.<sup>15</sup>
- Bear is a robot that was designed in 2005. It is a humanoid robot with a head and arms, but its legs are like the caterpillar treads of a tank. The legs are jointed so Bear can move on rough terrain and even climb. It can carry light loads as it travels. 16
- Robonaut 2, or **R2**, was the first humanoid robot in space, traveling to the International Space Station in 2011.<sup>17</sup>



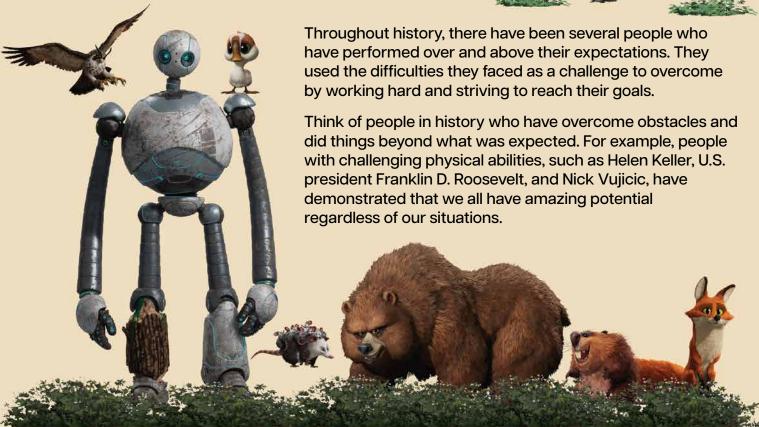


### **GOING BEYOND: AN OPPORTUNITY TO TALK TOGETHER**



A beautiful theme in *The Wild Robot* story is how individuals can perform beyond expectations. Roz is a robot that has specific programming which only allows her to perform specific tasks. Brightbill is a gosling runt, which means his small size makes it unlikely he will be able to fly the long distance a migration requires. During the story, we watch Roz, Brightbill, and many of the other animals surpass their "programming" to do unexpected and amazing things!





Are all challenges physical?
Is it possible that a person can have challenges that we can't see?
What are some ways you think you can go beyond your "programming" to meet your goals?
How can you help others around you do the same?

# DAY 4: LANGUAGE ARTS



#### **Animal Charades**

The game of charades is a great way to learn how to communicate well. Using facial and body clues to express a word or idea builds advanced thinking skills... and is fun! Play this game of animal charades with the whole family. Write the animal names from the list below on pieces of paper, fold each piece, and place them in a bowl. Now take turns drawing a word and trying to get everyone to guess which animal you are. For younger children, talk with them about animals they might not be familiar with and brainstorm how they might act out what those animals do before the game begins.



#### **CREATIVE WRITING – WRITE A CHILDREN'S STORY**



**The Wild Robot** has many story lines where Roz and the animals face difficulties and challenges. Traits such as **ENDURANCE** (continuing through difficulties), **SELFLESSNESS** (concern with the needs of others before oneself), and **PERSEVERANCE** (overcoming hardship) are learned and exhibited by Roz and the animals on the island as they experience **RESILIENCE** (recovering quickly from challenges) and kindness in adversity. They learn that you can take your gifts and abilities and use them for even greater things. No matter your size or abilities, you play a valuable part in the world around you!

Below is the beginning of a short story. Read it and complete the story in your own words, following the instructions.

### **Working Together**

In the quiet of the morning, a beaver was studiously working on building his dam as the river flowed slowly by. Benny, his young beaver kit, was playing with some small sticks nearby. Rrrrummble! Both beavers turned their heads to see a sudden storm that was raging up in the neighboring mountains. Before they could get to safety, there was a flood of water rushing down from the mountaintop. The surging water washed over the beavers and their dam. As both beavers held on, little Benny lost his grip and was carried away in the raging river. He swam as hard as he could until he had enough strength to make it to the river's edge. Wet and tired, Benny climbed up the riverbank and collapsed.

A few moments later, he heard rustling in a nearby bush. Two small eyes peered out at him. Benny was scared at first, but he realized he was looking at a young possum. Shyly, the possum came out of the bush. "Hello," she said. "My name is Pearl. I saw you crawl out of the water. Are you far from home?"

Wiping the extra water off his furry coat, Benny looked around him and replied, "I don't know. The storm made the river grow so quickly that I couldn't hold onto our dam, and I floated away from home. Do you live around here?"

Benny noticed Pearl's face drop. "No. I was outside our hole – just playing – but then the water came so fast that I didn't know what to do. I floated in the water for a while until I saw a branch that was hanging over the river. I reached up and grabbed it, and then climbed into this bush." Pearl then smiled. "You know that possums are good grabbers!"



### **WORKING TOGETHER CONTINUED PAGE 2**



Then Pearl looked sad. "But how am I going to find my way home?"

Benny vigorously rubbed the fur on his head which started waves of shaking that went along the length of his body. Water splattered everywhere. He took a deep breath and smiled.

"Well," he responded. "I need to get home, too. And I know which way to go!"

"You do?" Pearl said, her eyes becoming brighter.

"Yes. All beavers know that water flows downhill. We both were washed here, so we just need to follow the river back up hill until we find our families."

And so, the unlikely pair set off on their adventure – Pearl using her skills as a possum and Benny using his skills as a beaver to work together to find their way home.

Complete Pearl and Benny's adventure as they make their way along the river, looking for their homes. You can use their unique skills listed below to help you finish the story.

- Pearl the possum: Climbing, grasping, and balance, sense of smell to find food and navigate, defensive behavior of showing their teeth and hissing.
- Benny the beaver: Swimming, sharp teeth for gnawing, building dams or creating bridges, slap tails against the water to warn others of danger.
- End your story with a message to your readers about how the two animals used their special abilities and worked together as a team to do something they could not have done alone. Their skills and abilities are good, but they are even better when they work together!

Source: Sherri Seligson 2024

### **WORKING TOGETHER CONTINUED PAGE 3**



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### **VOCABULARY**

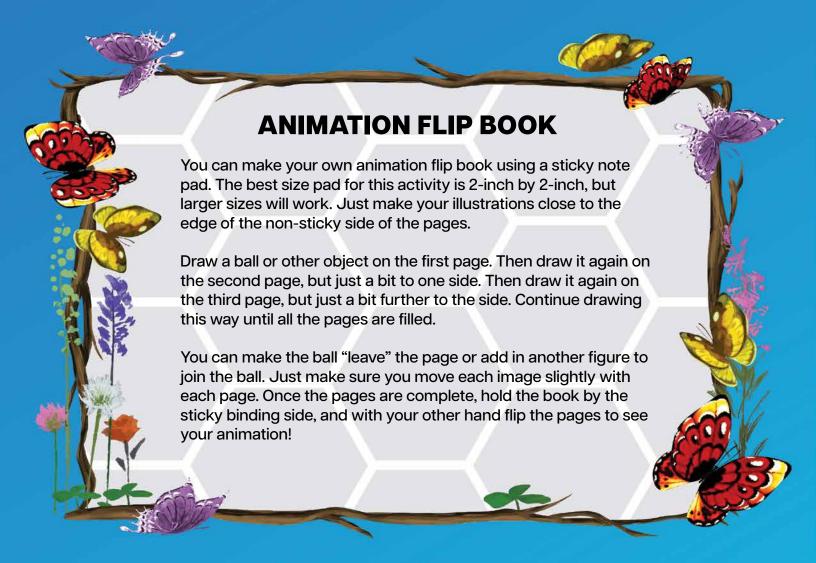
**HUMANOID** 

(HU·MAN·OID)

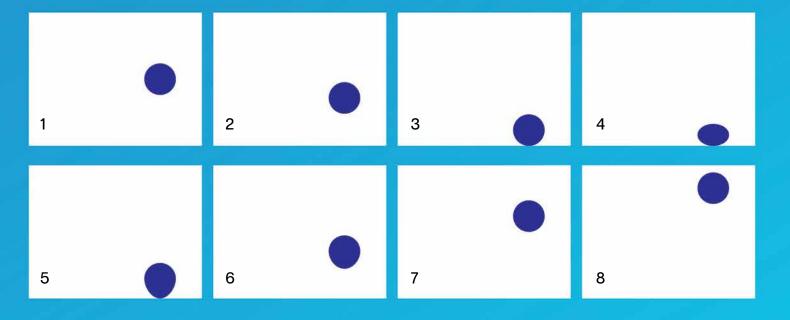
The words below are highlighted in blue throughout this activity book. Use the context from their sentences to determine their definitions. Write the definitions in the following spaces.

```
ENDURANCE
      (EN · DUR · ANCE)
CHARACTER WORDS
      SELFLESSNESS
       (SELF · LIS · NIS)
        RESILIENCE
       (RE·SIL·IENCE)
     PERSEVERANCE
    ( PER · SE · VER · ANCE )
      PHYSICAL MIMICRY
    (PHY·SI·CAL-MIM·IC·RY)
        MIGRATION
       (MI·GRA·TION)
SCIENCE WORDS
        PENINSULA
       (PEN·IN·SULA)
          ISTHMUS
         (ISTH · MUS)
       AUTOMATON
      (AU · TO · MA · TON)
```





Below is a diagram to help you understand how to animate a dot on paper.



### **DAY 5: FIELD TRIP**





# **MOVIE DAY IS HERE!**

It's time to see *The Wild Robot* at a matinee screening at a nearby theater. What's more, the good folks at Fandango have a special offer for homeschool families!

Simply go to Fandango.com and enter the promo code **STUDYWILDROBOT**, and receive \$10 off your ticket order to see *The Wild Robot* in theaters. See details below.\*

So get your friends, get your families and get your co-ops together and be the first to see *The Wild Robot* at an opening day matinee screening.



Let's send Hollywood a message that the Homeschool community will always support great – and educational – family entertainment!

#### To use your Fandango Promo Code, just follow these simple steps:

- 1. Visit Fandango at Fandango.com or via the Fandango mobile app.
- 2. Select your date, theater, time, and ticket quantity for The Wild Robot.
- 3. Sign in or create your free Fandango FanRewards account (or enter your email address for guest checkout).
- 4. Click "Promo Code," enter the code below and click "Apply".

#### **STUDYWILDROBOT**

5. Complete your purchase and decide how you want to pick up your ticket.





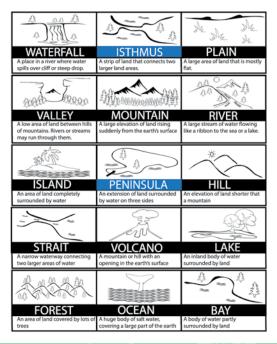
\*Limited time offer. While supplies last. Fandango Promotional Code ("Code") is good for up to \$10 (total ticket price and associated fees and charges) towards the purchase of one or more movie tickets in a single transaction made between 12:01AM PT on 9/11/24 and 11:59PM PT on 9/29/24 to see **The Wild Robot** at Fandango partner theaters in the US for a showtime taking place between 12:01AM PT on 9/27/24 and 11:59PM PT on 9/29/24. There is a limited quantity of Code redemptions allowed in this promotion. Code expires, and can no longer be used, upon the earlier of 11:59PM PT on 9/29/24, the maximum number of redemptions having been reached, or when **The Wild Robot** is no longer available in theaters. Only valid for purchase of movie tickets made at Fandango.com or via the Fandango app and cannot be redeemed directly at any theater box office. If lost or stolen, cannot be replaced. No cash value, except as required by law. Void where prohibited. Not valid with any other offer. Offer valid in U.S. and D.C., excluding U.S. territories and where prohibited by law. One-time use only. Limit one code per person. Not for resale; void if sold or exchanged. If cost of movie ticket(s) with Fandango's associated fees and charges included is more than maximum value of the Code, then user must pay the difference. Any price difference between movie ticket(s) purchased and maximum value of the Code will not be refunded. Excludes multiple admission tickets. Fandango is not a sponsor or co-sponsor of this offer. The redemption of the Code is subject to Fandango's Terms and Policies at http://www.fandango.com/terms-and-policies. FANDANGO and the Fandango Logo are registered trademarks of Fandango Media, LLC.





If you would like some additional resources and fun activities for your kids, DreamWorks Animation has created an Activity Kit available on the film's official website: https://www.thewildrobotmovie.com

#### Day 2: Geography: Landforms on the Island



# Day 4: Language Arts: Vocabulary Answers will vary.

#### **CHARACTER WORDS**

**ENDURANCE** – Continuing through difficulties.

**SELFLESSNESS** – Concern with the needs of others before oneself.

**PERSEVERANCE** – Overcoming hardship.

**RESILIENCE** – Recovering quickly from challenges.

#### **SCIENCE WORDS**

PHYSICAL MIMICRY - Using nature as an inspiration to produce mechanical devices that help robots move.

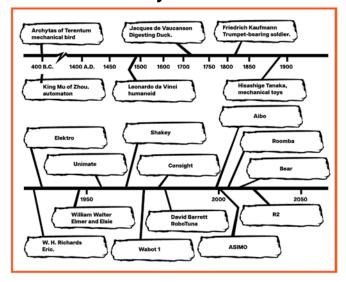
**MIGRATION** – The seasonal movement of animals from one part of the world to another.

**PENINSULA** – An extension of land surrounded by water on three sides.

**ISTHMUS –** A strip of land that connects two larger land areas.

**AUTOMATON** – A self-operating machine. **HUMANOID** – A machine that is human-like.

# Day 3: Social Studies and History: Create a Robot History Timeline



#### **History Timeline Sources:**

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- 4 Moran, M. E. (2007). Jacques de Vaucanson: The father of simulation. Journal of Endourology, 21(7), 679–683. https://doi.org/10.1089/end.2007.9951
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- 12 https://www.humanoid.waseda.ac.jp/booklet/kato\_2.html
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- 17 https://www.nasa.gov/robonaut2/