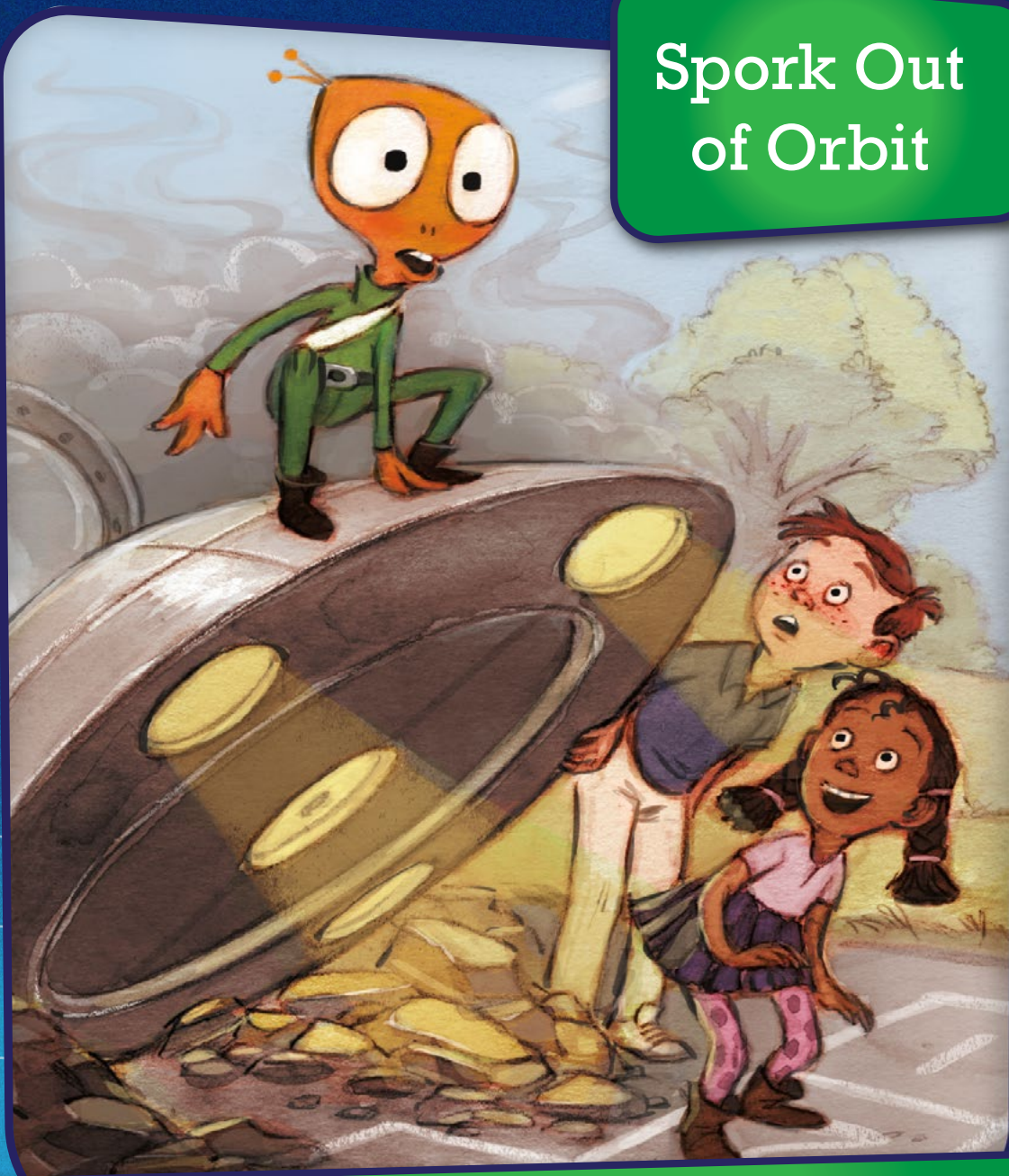


1 How to Be an  
**EARTHLING**®



Spork Out  
of Orbit



★ \* Mission Guide \* ★



# Spork Out of Orbit

## Mission 1: Build Your Own Spaceship



Dear classmates,

There was a lot of damage to Spork's spaceship when he crash landed in our playground. He says he can fix his spaceship with Gloop, but I just don't know if it will work. Can you help build Spork a new spaceship? Please make sure it won't be easily damaged if he has another crash, because I'm pretty sure he will!

Your friend,  
Trixie

### TASK:

Use some of the items provided to create your own spaceship. Do your best to make sure your spaceship will survive a crash. Then set up a crash test to prove that your spaceship is durable.

### FOCUS QUESTIONS:

1 What can you do to make your spaceship durable?

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2 How will you test to make sure your spaceship can survive a crash?

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### SUGGESTED SUPPLIES:

- newspaper
- glue
- tape
- stapler
- fabric scraps
- cardboard
- various sizes and types of recyclable containers
- tin foil
- plastic bags
- bubble wrap
- balsa wood
- markers
- paint
- clay
- yarn/ribbon/string

**K-2.ETS1-2.** Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a problem.

**3-5.ETS1-2.** Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time or cost.

# Spork Out of Orbit

## Mission 2: Earthling Training Center



Dear class,

Spork has a LOT to learn about living on Earth. What are some of the important things you think he needs to know? Can you help teach Spork? I'd really appreciate your assistance!

Your teacher,  
Mrs. Buckle

### TASK:

It's your turn to be the teacher. Think about something that Spork or any alien visiting your school would need to know. Create a lesson to teach them that skill, character trait, or information. Make a poster to help you teach that lesson. Then present the lesson to your classmates.

### FOCUS QUESTIONS:

- 1 List three things that someone new to our planet would need to know.

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- 2 Which lesson do you think is most important to teach to Spork? Why do you think this is the most important lesson?

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### SUGGESTED SUPPLIES:

- large poster paper
- markers
- pencils
- crayons

#### CCSS.ELA-LITERACY.SL.3.4.

Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.

#### CCSS.ELA-LITERACY.SL.4.4.

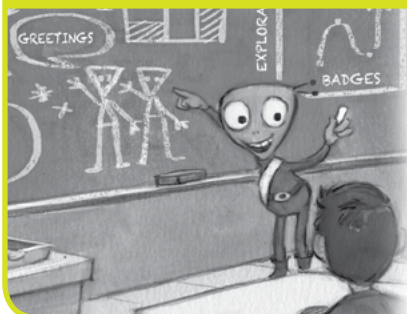
Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

#### CCSS.ELA-LITERACY.SL.5.4.

Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

# Spork Out of Orbit

## Mission 3: Space Books



Dear classmates,

*I've always been the expert on outer space in my class. I didn't think anyone knew more than me about the planets, but then Spork showed up. I have to learn more—let's do some research!*

*Your friend,  
Jack*

### TASK:

Choose a topic related to space (examples: a planet, a constellation, Earth's moon) and research the topic. Use a web like the one on the next page to take notes. Then use the information you learned to write a picture book. Make sure your book includes at least three important facts about your topic.

### FOCUS QUESTIONS:

- 1 Before reading: What questions do you have about your topic?

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- 2 After reading: What questions do you still have about your topic?

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### SUGGESTED SUPPLIES:

- paper
- rulers
- markers
- pencils
- crayons
- access to web resources or reference books

### CCSS.ELA-LITERACY.CCRA.R.2.

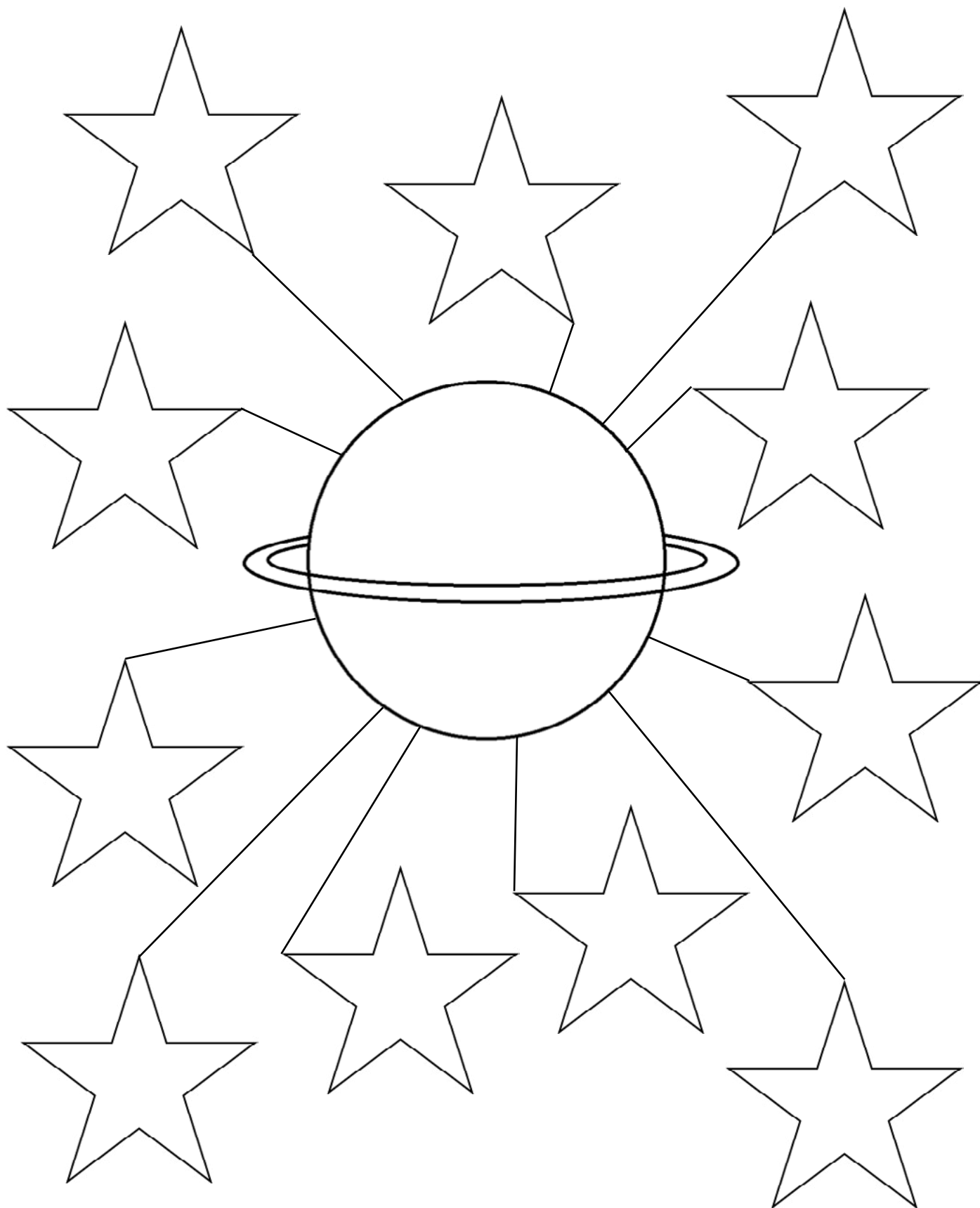
Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

### CCSS.ELA-LITERACY.CCRA.W.2.

Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.



## Spork Out of Orbit



# Spork Out of Orbit

## Mission 4: Earth Days



Dear classmates,

Did you hear what Spork said? One day on his planet is much longer than a day on our planet. I wonder how the length of our day compares to the length of days on the other planets. Can you help me find out?

Your friend,  
Trixie

### TASK:

A planet's day is the amount of time that planet takes to rotate once. Use the chart to compare the amount of time in each planet's day to an Earth day. Then create a clock for another planet's day.

**TIP:** On Earth, an analog clock has 12 hours, and during one day the hands go around the clock twice, for a total of 24 hours.

### FOCUS QUESTIONS:

- One day on Earth is longer than two days on two other planets. Which planets are they? How do you know?  
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- Which planet's day is equal to almost 60 days on Earth? How do you know?  
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- Write two statements comparing the length of days on different planets.  
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- Which planet did you create a clock for? How many hours are on your clock? How many times do the hands on your clock go around in one day on that planet?  
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\_\_\_\_\_

PLANET	HOURS IN A DAY
Mercury	1,408
Venus	5,832
Earth	24
Mars	25
Jupiter	10
Saturn	11
Uranus	17

**CCSS.MATH.PRACTICE.MP1.**  
Make sense of problems and persevere in solving them.

**CCSS.MATH.PRACTICE.MP2.**  
Reason abstractly and quantitatively.