

Buzzy's Blast-Off

Grades: PK-3

Duration: 30 Minutes

Program Description

Buzzy the Bee takes students on an interactive journey from Earth into Space. Countdown for a blast-off to the moon, take a tour of the solar system and wish upon a falling star!

Louisiana GLE:

PK

Math:

1. Count by ones to 10

Science:

1. Ask questions about objects and events in the environment
2. Pose questions that can be answered by using students' own observations and scientific knowledge
3. Use the five senses to describe observations
28. Learn about objects in the sky through nonfiction literature

English Language Arts

Reading and Responding

Standard 1

4. Orally respond to questions using new vocabulary introduced in conversations, activities, stories, or books

Standard 7

14. Use simple reasoning skills, including

Speaking and Listening

Standard 4

22. Carry on a conversation about a topic, thought, or idea from the classroom, home, or community
23. Repeat an instruction given orally
24. Follow one- and two-step verbal and nonverbal directions
29. Recognize and follow agreed-upon rules for discussing, such as raising one's hand, waiting one's turn, and speaking one at a time

Kindergarten

Science

1. Ask questions about objects and events in the environment
2. Pose questions that can be answered by using students' own observations and scientific knowledge
32. Discuss and differentiate objects seen in the day and/or night sky

English Language Arts

Speaking and Listening

Standard 4

33. Initiate and sustain normal conversation on a specific topic with the teacher
35. Give and follow one- and two-step verbal and nonverbal directions without interrupting
40. Participate in designated roles within activities

Math

3. Use the ordinal numerals 1st through 10th to discuss positions (Which planet is 1st?)

1st Grade:

Science

1. Ask questions about objects and events in the environment
2. Pose questions that can be answered by using students' own observations and scientific knowledge
36. Locate and Compare the relative proportions of land and water found on earth

English Language Arts

Reading and Responding

Standard 7

Apply basic reasoning skills

Speaking and Listening

Standard 4

46. Follow procedures according to teacher directions
47. Ask questions to clarify directions
53. Use active listening strategies
54. Listen and orally respond to information presented

2nd Grade:

Science

1. Ask questions about objects and events in the environment
2. Pose questions that can be answered by using students' own observations and scientific knowledge
43. Describe characteristics of the sun, stars, and Earth's moon (relative size, shape, color, production of heat)
44. Give examples of how the Sun affects Earth's processes (weather, water cycle) – Why can we live on Earth? Is it hot or cold on Mars?

English Language Arts

Reading and Responding

Standard 7

20. Apply basic reasoning skills

Speaking and Listening

Standard 4

38. Adjust speaking tone and volume to suit purpose and audience
44. Use active listening strategies
45. Listen and orally respond to information presented
48. Identify the role of discussion leader, contributor and active listener

3rd Grade:

Science

1. Ask questions about objects and events in the environment
3. Pose questions that can be answered by using students' own observations and scientific knowledge
53. Identify, in order, the planets of the solar system
55. Explain the results of the rotation and revolution of Earth (day and night, year)

English Language Arts

Reading and Responding

Standard 7

20. Apply basic reasoning skills

Speaking and Listening

Standard 4

38. Give and follow precise directions and instructions
42. Use active listening strategies
44. Assume the role of discussion leader, contributor, and active listener

Key Terms:

Scaled model: a ratio representing the size of an illustration or reproduction, especially a map or a model, in relation to the object it represents

Orbit: a single revolution of a celestial body around a larger body

Spin/ Rotation: The complete rotation of the earth on its axis

Sphere: a celestial object, for example, a planet, moon, or star

Moon phase: any of the recurring forms seen in the sky of the Moon or a planet.

Connections to Permanent Exhibits:

Scaled model of planets around the Space Dome located upstairs in the planetarium

Web Resources:

NASA Star Child

<http://starchild.gsfc.nasa.gov/docs/StarChild/StarChild.html>

A NASA site intended for children in grades K-8. Teachers will find a teacher's page with classroom activities. Students will be able to find answers to questions on the solar system.

Pre-Visit Activities:

1. Play Planet Concentration
2. Time Machine
3. Orange Rotation/Revolution Experiment

Post-Visit Activity:


1. Space News
2. Estimating the Distance













Name _____ Date _____

Planet Concentration

Use the cards below to play Planet Concentration.

1. Color and cut out the cards.
2. Get together with 3 other players and their cards.
3. Shuffle all 4 sets of cards together.
4. Turn all the cards face down in 4 rows with 9 cards in each row.
5. Take turns turning over 2 cards at a time. Try to find 2 cards that match. If you get a matching pair, take another turn.
6. The player who finds the most pairs wins.



 moon	 sun	 asteroids	 Mercury
 Venus	 Earth	 Mars	 Jupiter
 Saturn	 Uranus	 Neptune	 Pluto

Name _____ Date _____

Time Machine

How much do you know about these words?
Mark your answers with an **X**.

Word	I know what this word means.	I have seen or heard this word.	I don't know what this word means.
star			
planet			
solar system			
crater			
axis			
rotate			
orbit			
revolution			
satellite			
tide			
phase			
telescope			
astronaut			

Put a check (✓) in the box after you complete each task.

- Practice saying each science word out loud.
- Spell each science word out loud.
- Write a sentence for each vocabulary word you know.



Notes for Home Your child practiced writing and spelling the science vocabulary words.
Home Activity: Ask your child to use the science vocabulary in oral sentences.

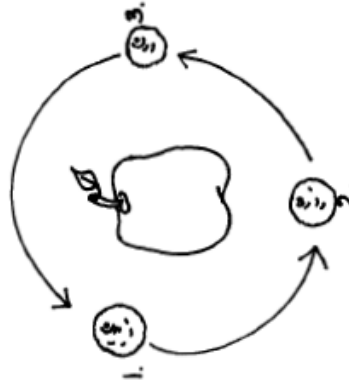
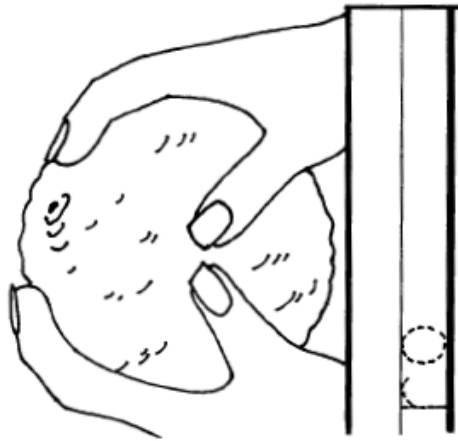
The Orange Rotation/Revolution Experiment

ROTATE—Take a whole orange and hold it in your two hands. Slowly move it around and around. This is an example of making an object rotate.

REVOLVE—Put an object, like an apple, in the center of a table. Move the orange around and around the object. This is an example of making an object revolve.

Did you know that the earth does both? It rotates and revolves around the sun.

Print or write “rotate” in the space below. Print or write “revolve” in the space below.



Space News

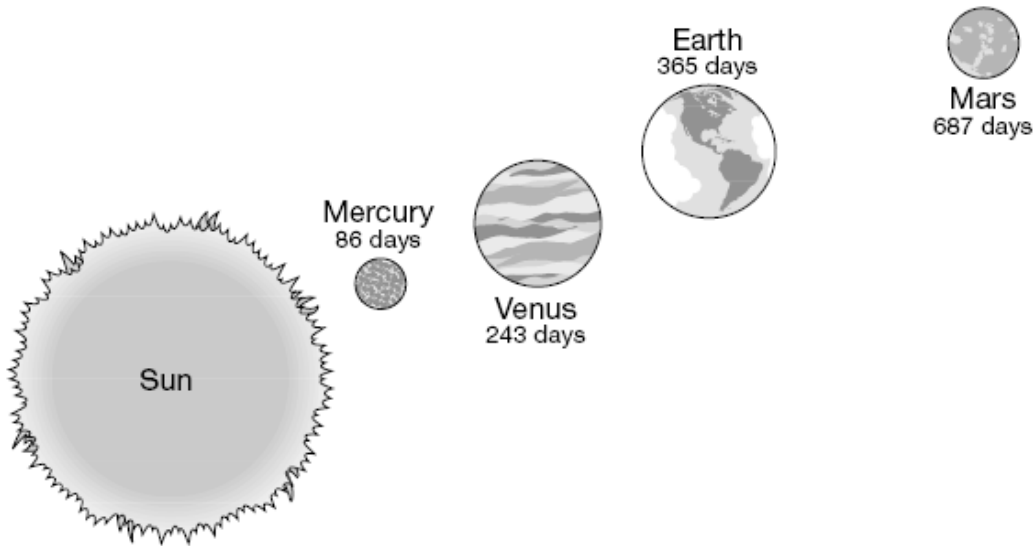
You are a news reporter and have just arrived on another planet. Using factual information about the planet of your choice, prepare a news article for your newspaper about the planet.

A large rectangular box designed for writing. On the left side of the box is a vertical line drawing of a rocket with a pointed nose cone and a flame-like base. To the right of the rocket are approximately 20 horizontal lines for writing, arranged in two columns of ten lines each.

Name _____

Estimating Differences

Science The drawing below shows the number of days it takes some of the planets in our solar system to orbit the sun. One full orbit of the sun is one year.



1. About how many days longer does it take for Mars to circle the sun than Earth? _____
2. About how many days longer does it take Mars to circle the sun than Mercury? _____
3. About how many days shorter is a year on the planet Venus than a year on Earth? _____

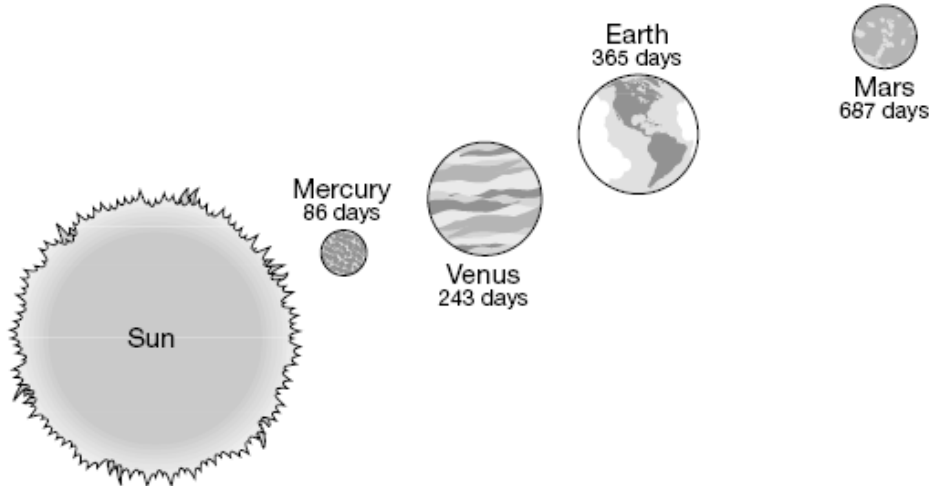
4. If a movie lasts 186 minutes and you have been watching for 105 minutes, about how much longer will the movie run?

5. Suppose the school day lasts 6 hours and 25 minutes, or 385 minutes total. By lunch time 172 minutes of the school day is over. About how many minutes are there left until the end of the school day?

Name _____

Estimating Differences

Science The drawing below shows the number of days it takes some of the planets in our solar system to orbit the sun. One full orbit of the sun is one year.



1. About how many days longer does it take for Mars to circle the sun than Earth? About 300 days
2. About how many days longer does it take Mars to circle the sun than Mercury? About 600 days
3. About how many days shorter is a year on the planet Venus than a year on Earth? About 100–200 days

4. If a movie lasts 186 minutes and you have been watching for 105 minutes, about how much longer will the movie run?
About 100 minutes
5. Suppose the school day lasts 6 hours and 25 minutes, or 385 minutes total. By lunch time 172 minutes of the school day is over. About how many minutes are there left until the end of the school day?
About 200 minutes

