

National Aeronautics and Space Administration



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SPACE RANGER FLIGHT * PATH



Students combine their interest in science with math skills to complete the Space Ranger Flight Path activity.

ACTIVITY OBJECTIVES

- Students will use problem-solving and critical thinking skills to create a path that will lead Buzz Lightyear to his orbiter.
- Students will list sequenced directions for the flight path on the grid using directional words and number of spaces, or ordered pairs of numbers.
- Students will share flight path directions with peers for completion.

MATHEMATICS STANDARDS

Number and Operations

- Understand numbers, ways of representing numbers, relationships among numbers, and number systems.

Geometry

- Specify locations and describe spatial relationships using coordinate geometry and other representational systems.

Problem Solving

- Solve problems that arise in mathematics and in other contexts.

Communication

- Communicate their mathematical thinking coherently and clearly to peers, teachers, and others.



Space Cadet _____

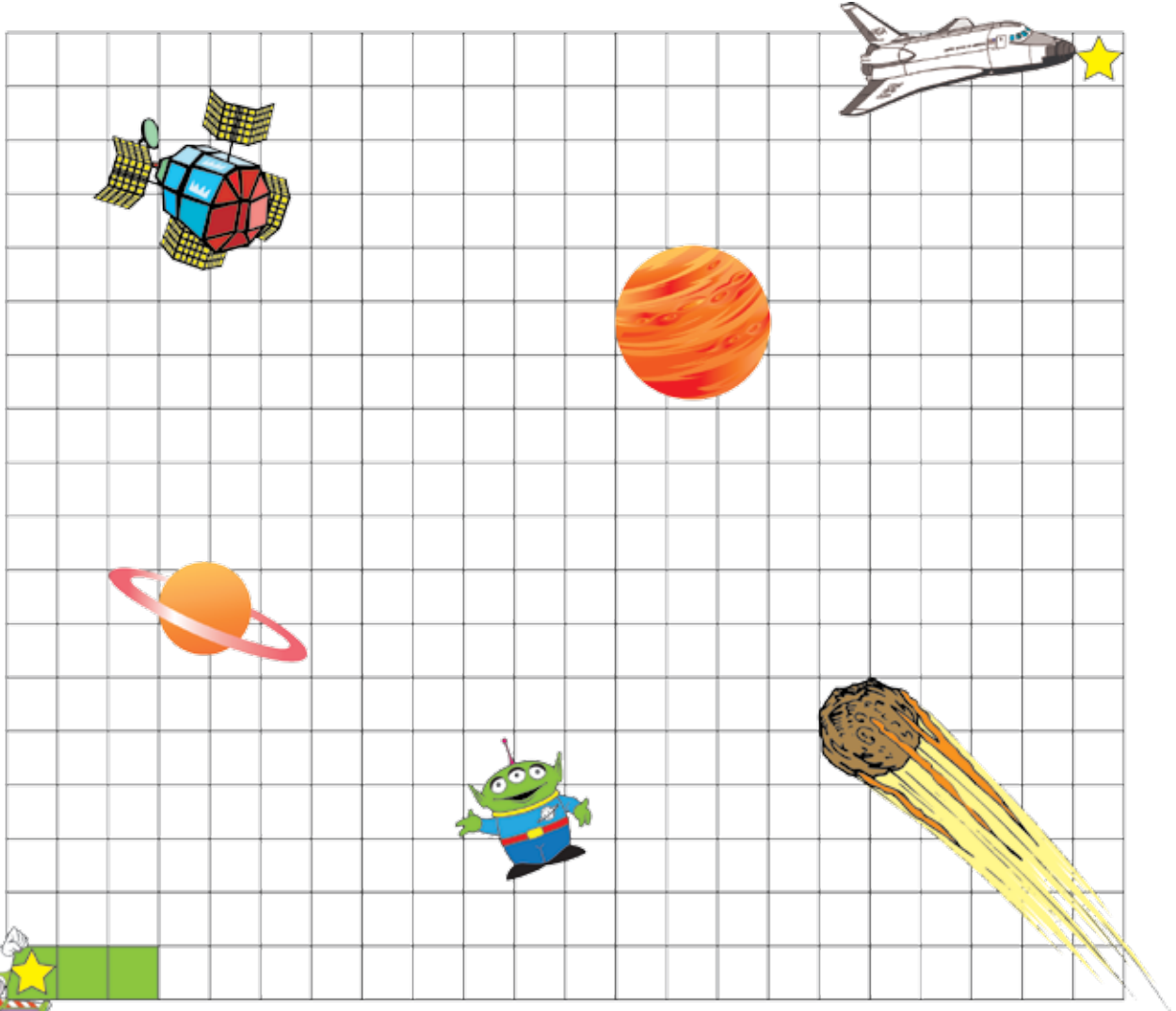
● Give Buzz Lightyear the directions he will need to reach his orbiter.



● Be sure to tell him how many steps to take (each block = 1 step) and which way to turn. Remember to avoid all obstacles!

● Once you have written the directions below, give Buzz Lightyear's flight path to a friend. Ask your friend to follow the directions, coloring the path Buzz Lightyear will follow to reach his orbiter.

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DIRECTIONS FOR FLIGHT PATH

(Use as many or as few steps as you need.)

1 **EXAMPLE:** Move Buzz Lightyear 3 blocks to the right. 5

2 6

3 7

4 8

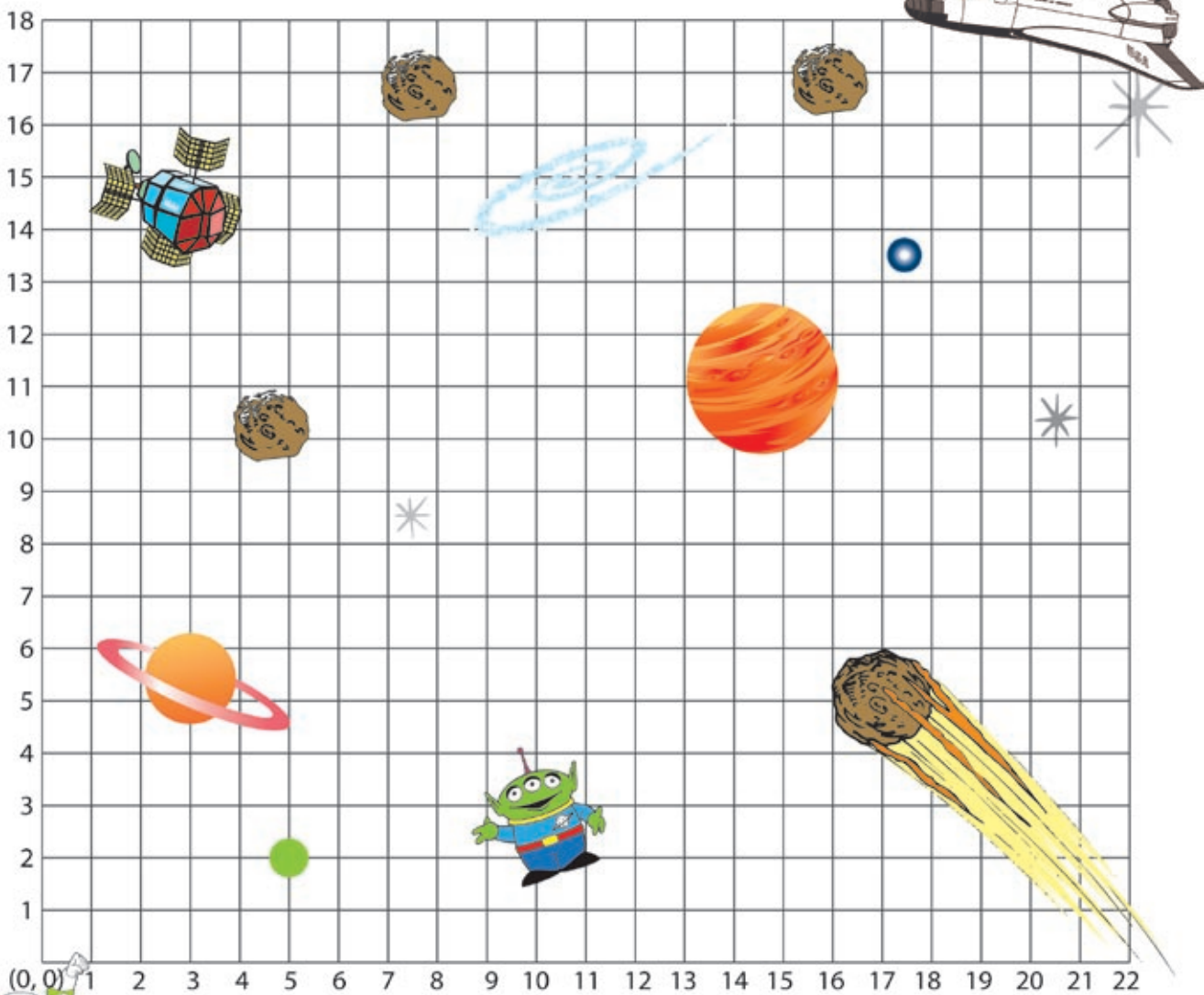
● Give Buzz Lightyear the directions he will need to reach his orbiter.



● List a set of ordered pairs that will lead Buzz Lightyear to his space ship. Remember, to avoid all obstacles!

● Once you have written the directions below, give Buzz Lightyear's flight path to a friend. Ask your friend to follow the directions, coloring the path Buzz Lightyear will follow to reach his orbiter.

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DIRECTIONS FOR FLIGHT PATH

(Use as many or as few steps as you need.)

1 **EXAMPLE:** (5,2)

4

7

10

2

5

8

11

3

6

9

12