

# To be able to describe linear movements and turns on a grid

Success criteria:

- ✓ I can use my knowledge of movements on a grid and part and full turns to describe linear movements and turns on a grid
- ✓ I can explain my reasoning when using my knowledge of movements on a grid and part and full turns to describe linear movements and turns on a grid

## To be able to describe linear movements and turns on a grid

Activity 1:

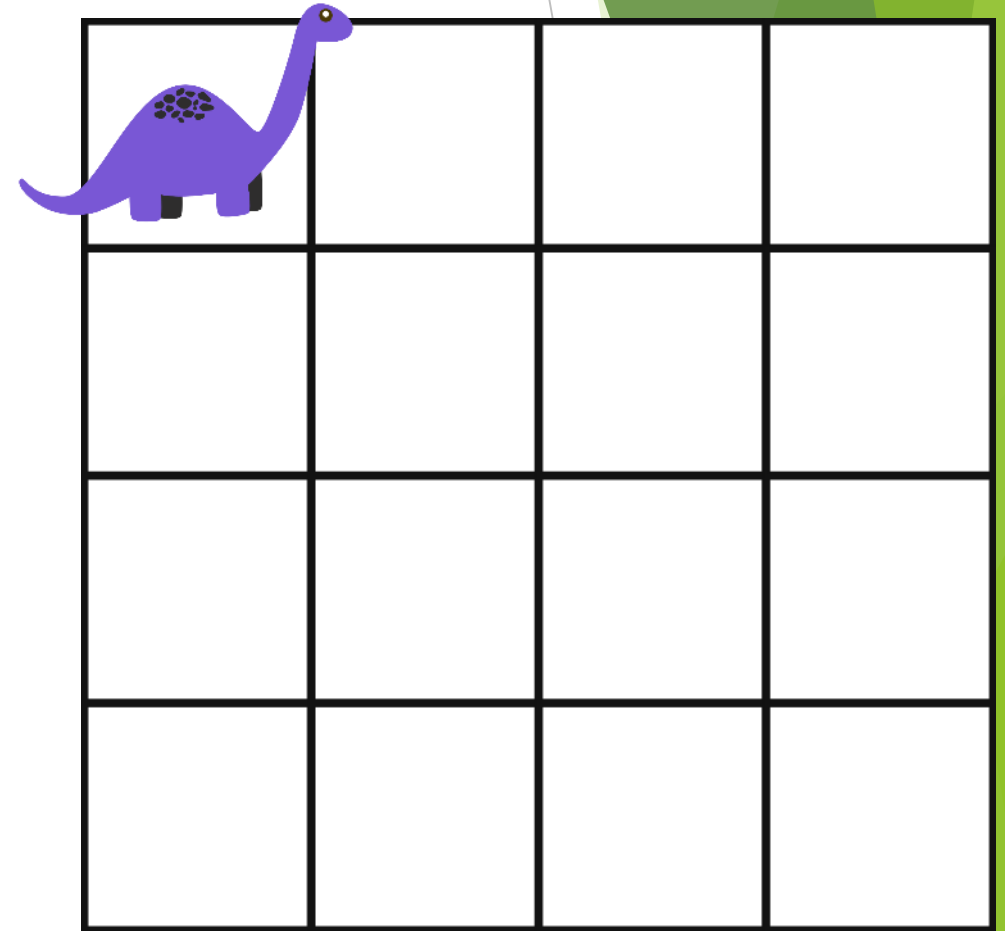
Draw a four space by four space grid.

Partner 1 has a toy (like the dinosaur).

Partner 2 gives instructions like:

- ▶ “Move the toy on the grid right by two spaces, then turn it clockwise by a quarter turn, then move it down the grid three spaces.”

(Repeat with children acting as the object on a four by four grid drawn in the playground.)

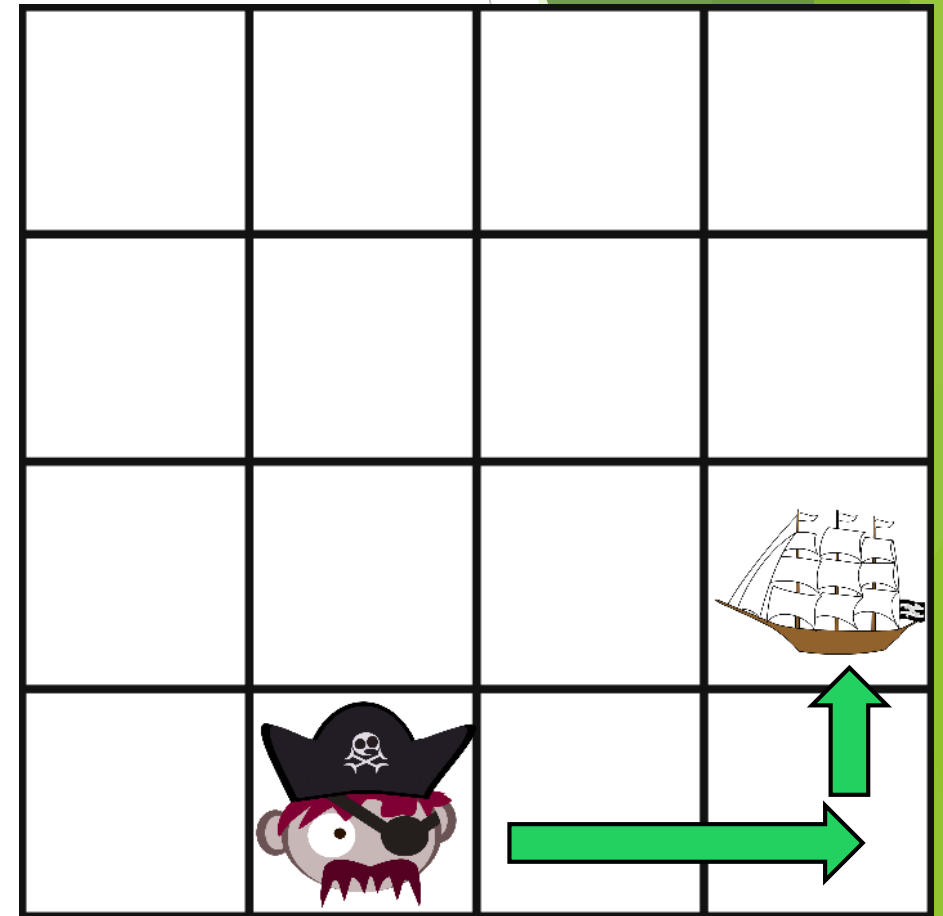


## To be able to describe linear movements and turns on a grid

Talking Time:

Complete the sentences below to describe Captain Redbeard's route back to the pirate ship.

Redbeard needs to move \_\_\_\_\_  
along the grid two spaces,  
make a quarter turn \_\_\_\_\_  
\_\_\_\_\_, then move \_\_\_\_\_ the grid  
one space.

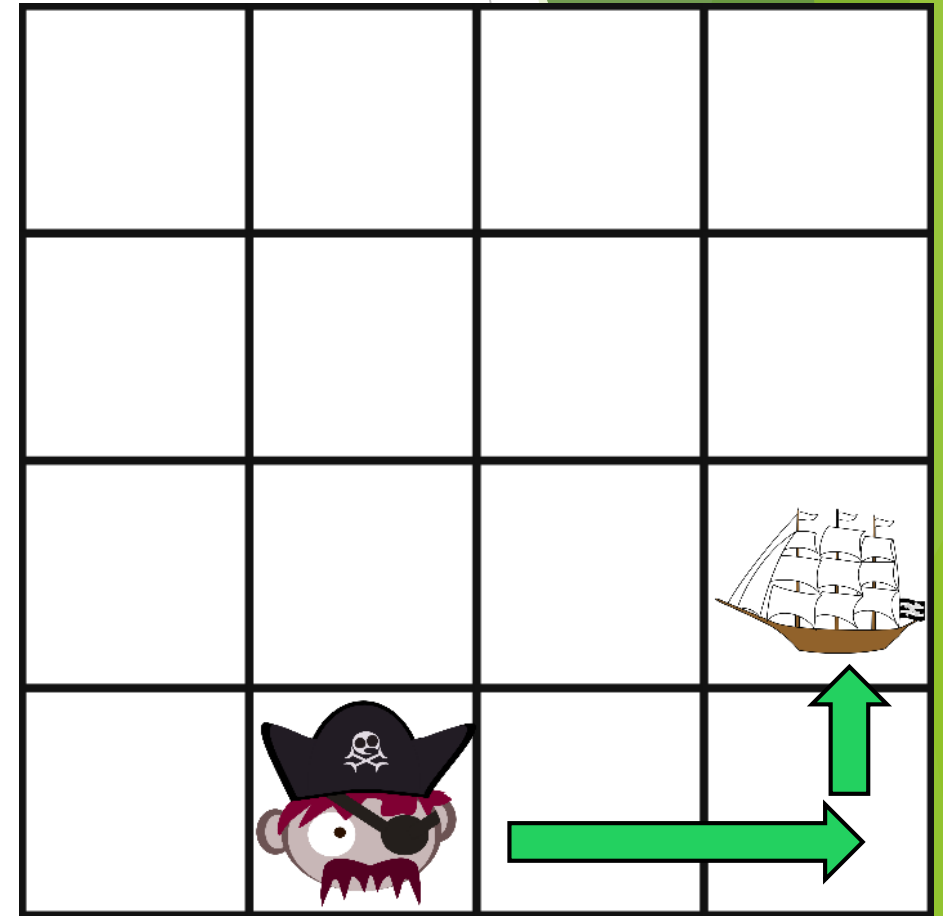


# To be able to describe linear movements and turns on a grid

Talking Time:

Complete the sentences below to describe Captain Redbeard's route back to the pirate ship.

Redbeard needs to move right along the grid two spaces, make a quarter turn anti-clockwise, then move up the grid one space.

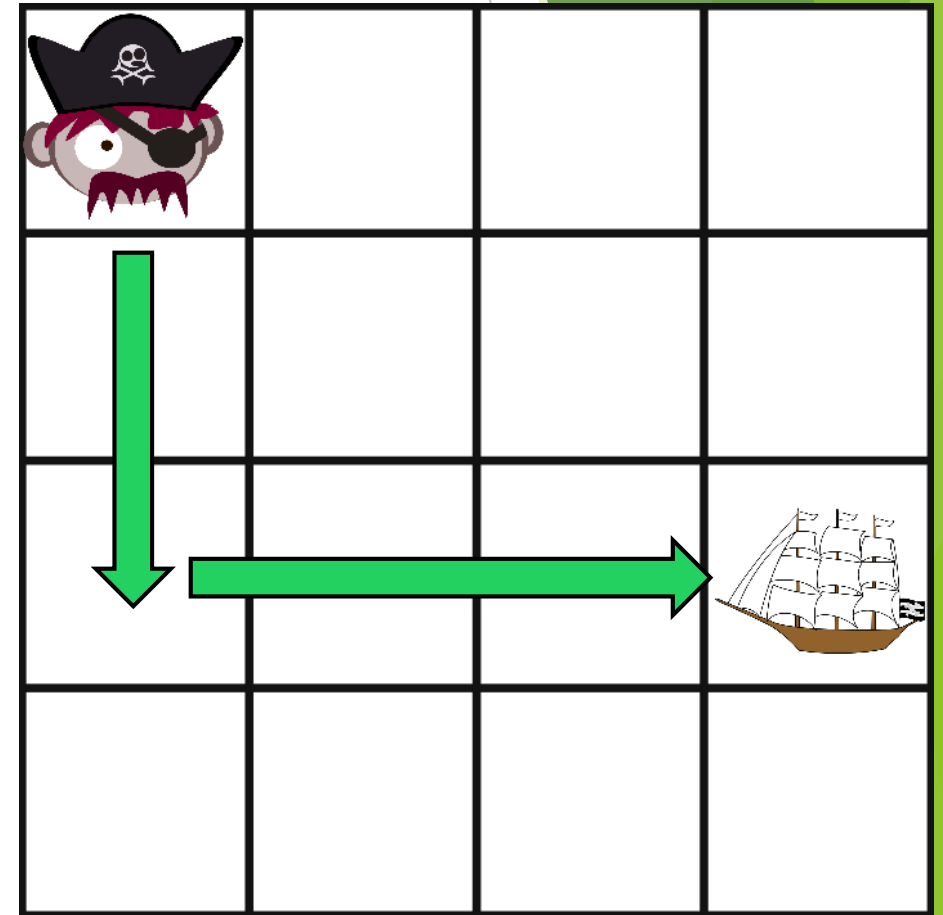


## To be able to describe linear movements and turns on a grid

Talking Time:

Complete the sentences below to describe Captain Redbeard's route back to the pirate ship.

Redbeard needs to move \_\_\_\_\_ the grid two spaces, make a quarter turn \_\_\_\_\_, then move \_\_\_\_\_ on the grid three spaces.

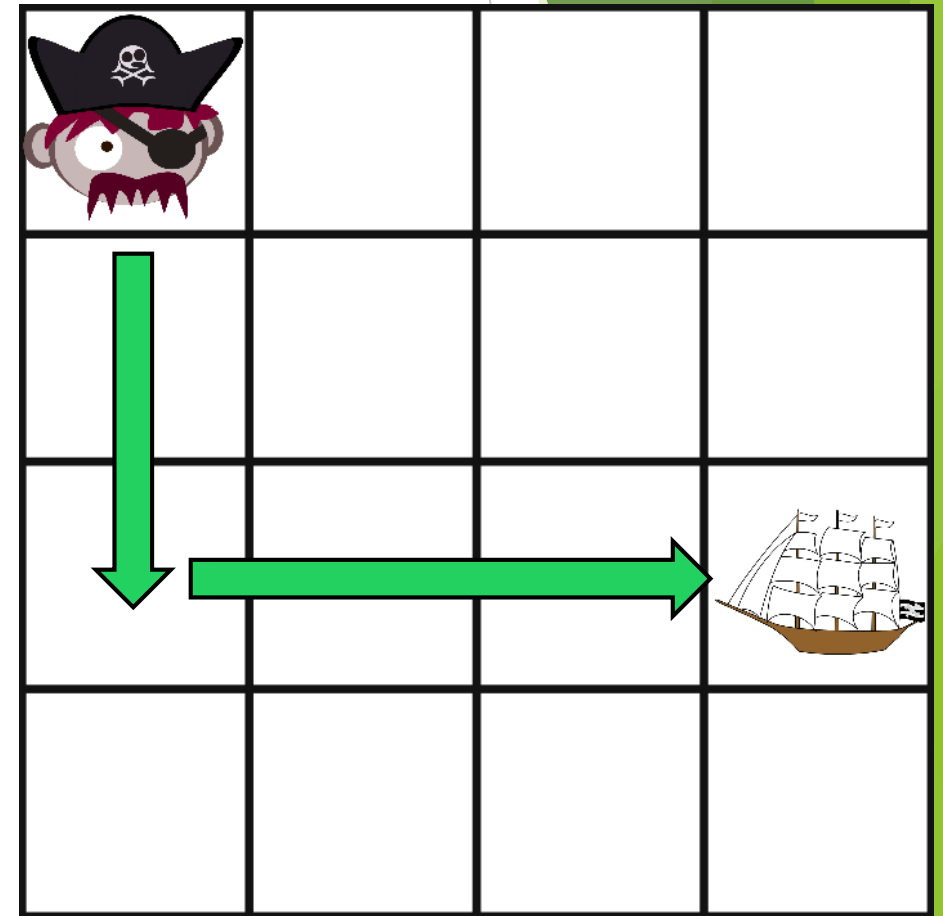


## To be able to describe linear movements and turns on a grid

Talking Time:

Complete the sentences below to describe Captain Redbeard's route back to the pirate ship.

Redbeard needs to move down the grid two spaces, make a quarter turn anti-clockwise, then move right on the grid three spaces.



## To be able to describe linear movements and turns on a grid

Activity 3:

Draw arrows to represent the following directions:

- ▶ Move up the grid one space.
- ▶ Move right on the grid two spaces.
- ▶ Move up the grid two places.

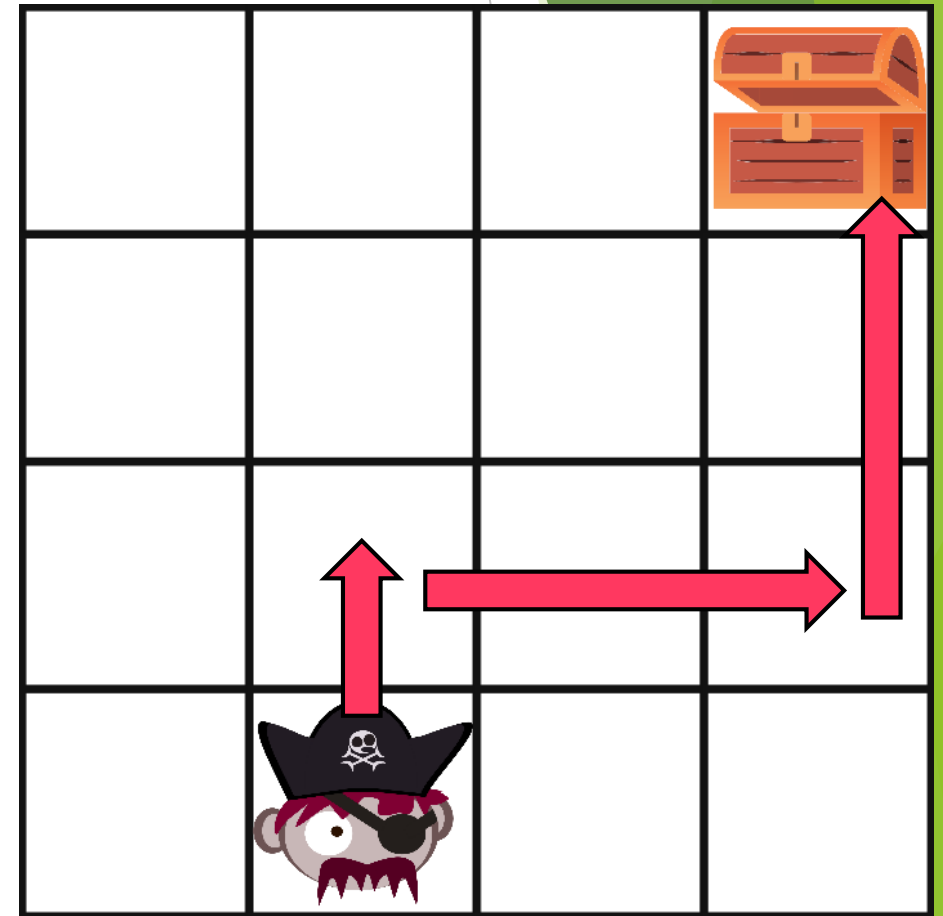


## To be able to describe linear movements and turns on a grid

Activity 3:

Draw arrows to represent the following directions:

- ▶ Move up the grid one space.
- ▶ Move right on the grid two spaces.
- ▶ Move up the grid two places.



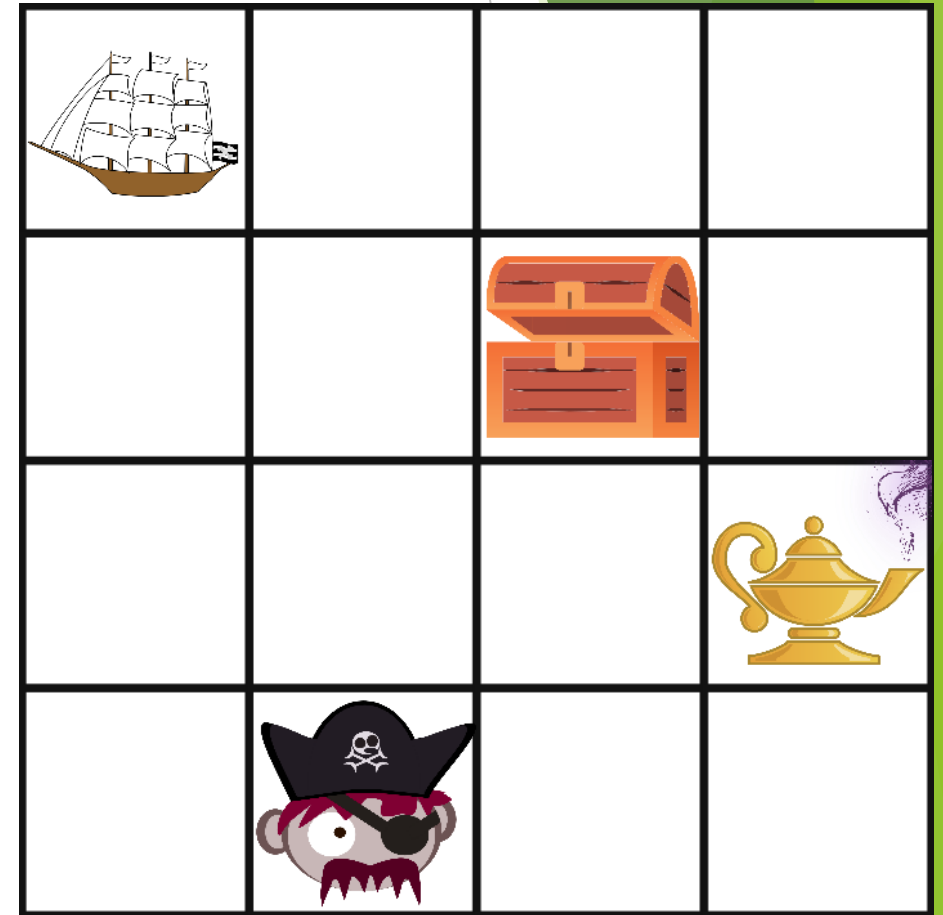


# To be able to describe linear movements and turns on a grid

Talking Time:

Create instructions to help Captain Redbeard get to:

- a) the treasure chest
- b) the pirate ship
- c) the gold lamp



## To be able to describe linear movements and turns on a grid

Talking Time:

Create instructions to help Captain Redbeard get to:

a) the treasure chest

Captain Redbeard should head along the grid right one space, then turn anti-clockwise a quarter turn, then move up the grid two spaces.



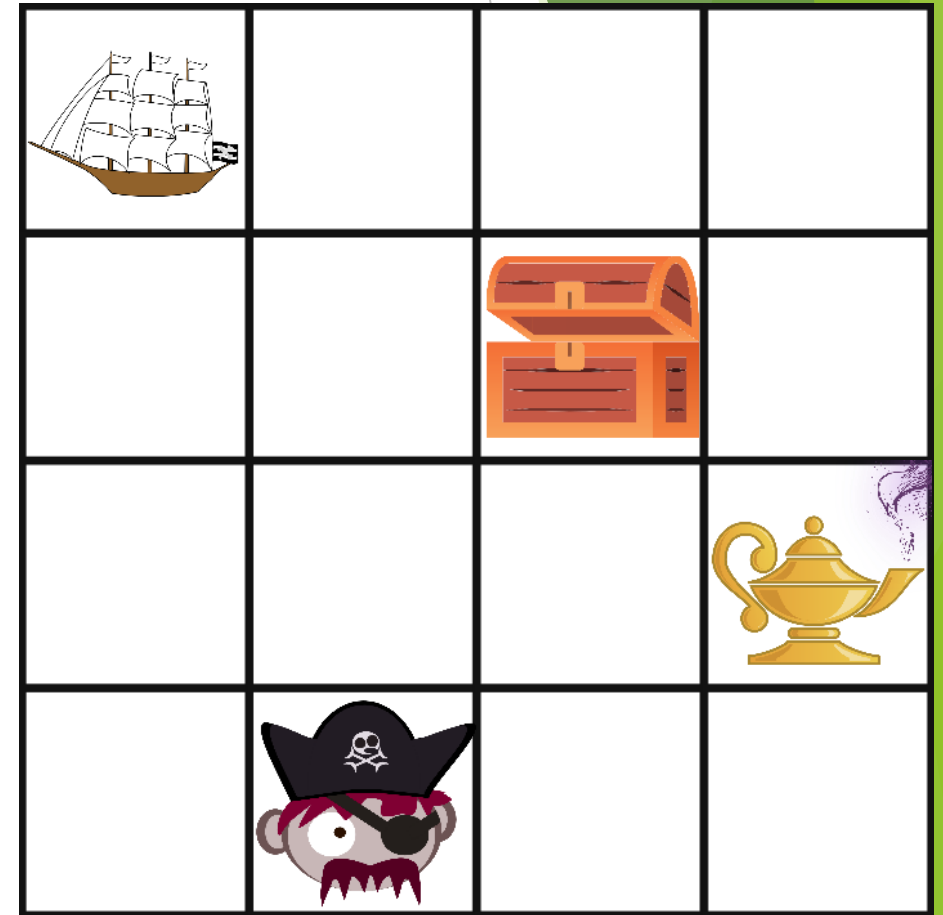
# To be able to describe linear movements and turns on a grid

Talking Time:

Create instructions to help Captain Redbeard get to:

b) the pirate ship

Captain Redbeard should go forwards on the grid three spaces, make a quarter turn anti-clockwise, then move one space left on the grid.



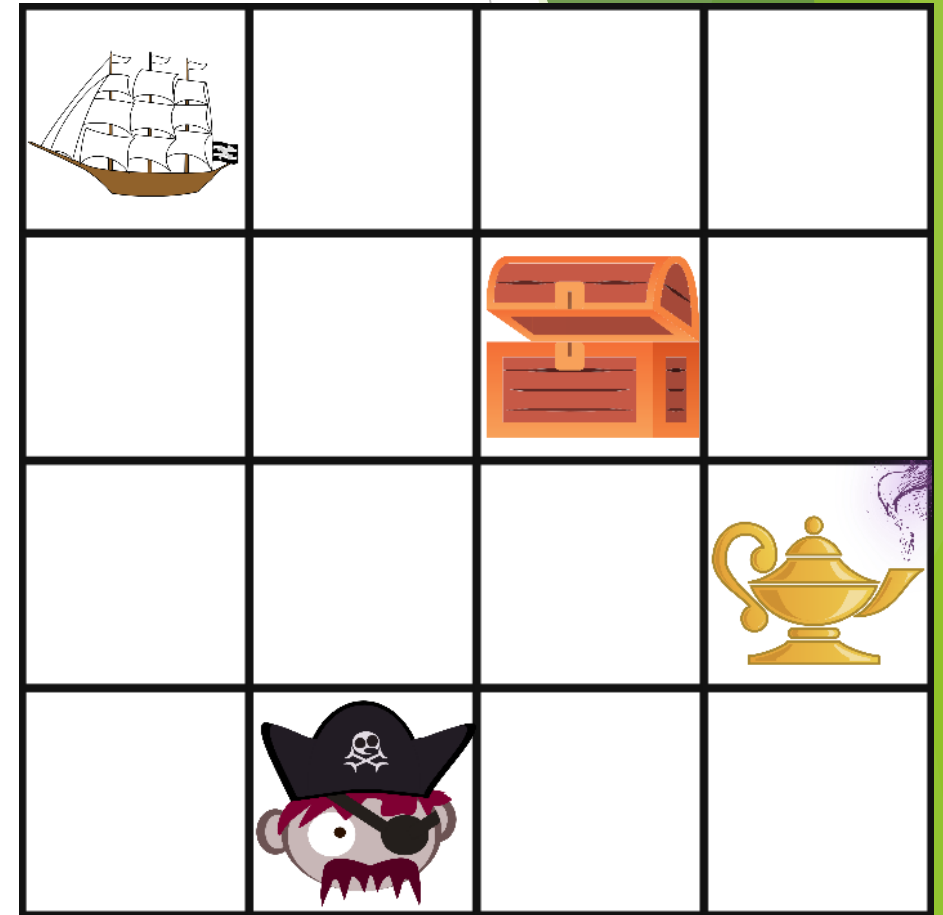
## To be able to describe linear movements and turns on a grid

Talking Time:

Create instructions to help Captain Redbeard get to:

c) the gold lamp

Captain Redbeard should head two spaces right on the grid, make a quarter turn anti-clockwise then head up the grid one space.



# To be able to describe linear movements and turns on a grid

Activity 4:

Create instructions to help Captain Redbeard get to:

- a) the treasure chest
- b) the pirate ship
- c) the gold lamp



## To be able to describe linear movements and turns on a grid

Activity 4:

Create instructions to help Captain Redbeard get to:

a) the treasure chest

Captain Redbeard should head along the grid down two spaces, then turn anti-clockwise a quarter turn, then move along the grid right by one space.



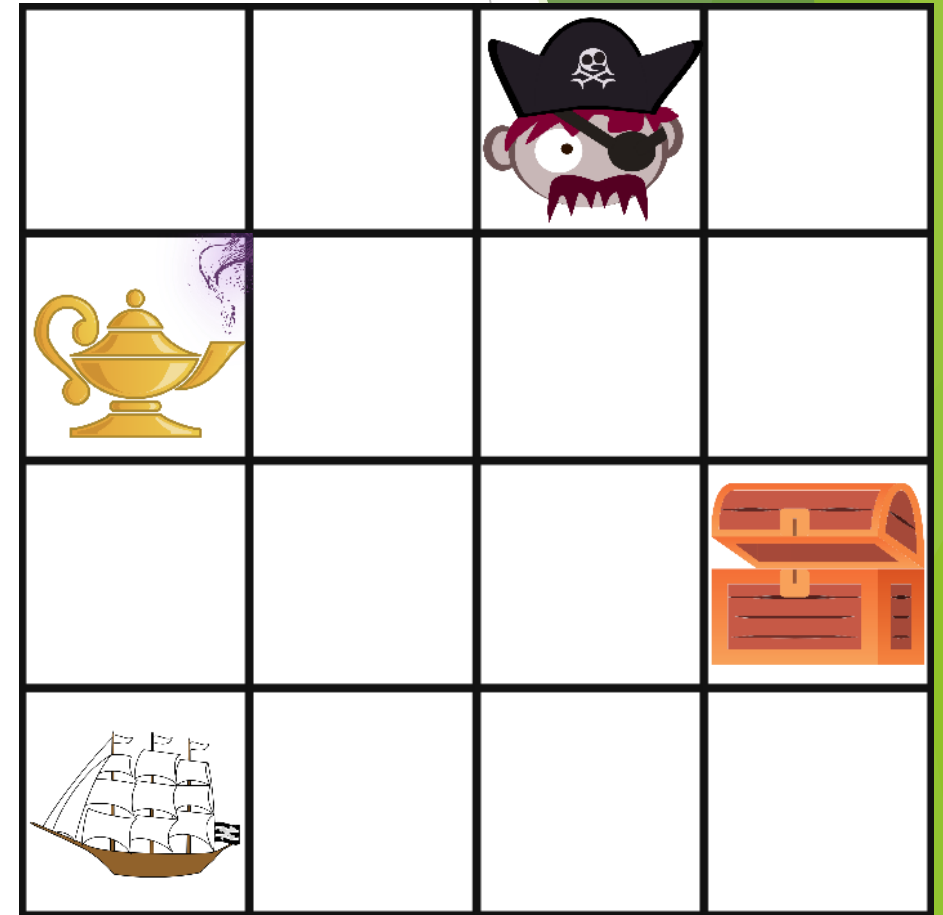
# To be able to describe linear movements and turns on a grid

Activity 4:

Create instructions to help Captain Redbeard get to:

b) the pirate ship

Captain Redbeard should head down on the grid three spaces, make a quarter turn clockwise, then move two spaces left on the grid.



## To be able to describe linear movements and turns on a grid

Activity 4:

Create instructions to help Captain Redbeard get to:

c) the gold lamp

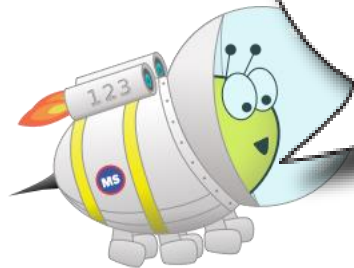
Captain Redbeard should head one space down on the grid, make a quarter turn clockwise then move left on the grid two spaces.





# To be able to describe linear movements and turns on a grid

Evaluation:

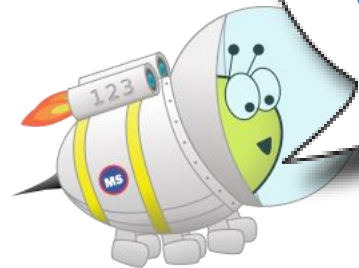


If I make a quarter turn anti-clockwise, I will face a different direction than making a three-quarter turn clockwise.

Do you agree with Astrobee's directions?  
Provide a sketch to prove your answer.

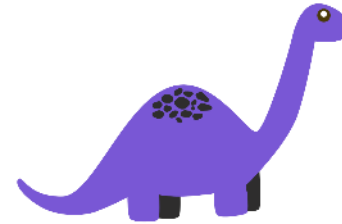
# To be able to describe linear movements and turns on a grid

Evaluation:

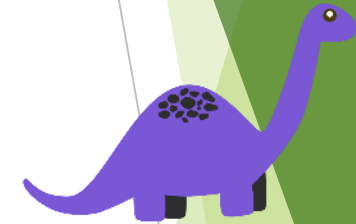


If I make a quarter turn anti-clockwise, I will face a different direction than making a three-quarter turn clockwise.

quarter turn  
anti-clockwise



three-quarter  
turn clockwise



No, I do not agree. If I stand and face the classroom door then turn a quarter clockwise or make a three-quarter turn anti-clockwise, I end facing in the same direction.

# To be able to describe linear movements and turns on a grid

Success criteria:

- ✓ I can use my knowledge of movements on a grid and part and full turns to describe linear movements and turns on a grid
- ✓ I can explain my reasoning when using my knowledge of movements on a grid and part and full turns to describe linear movements and turns on a grid