



go up one square



go right one square



go left one square



go down one square



do this part N times

from activity 55



if this, then that

from activity 71



the broken step

from activity 37

Follow three arrows.

Start at the robot. Follow each arrow one square. Draw where it lands.

CODE



1



2



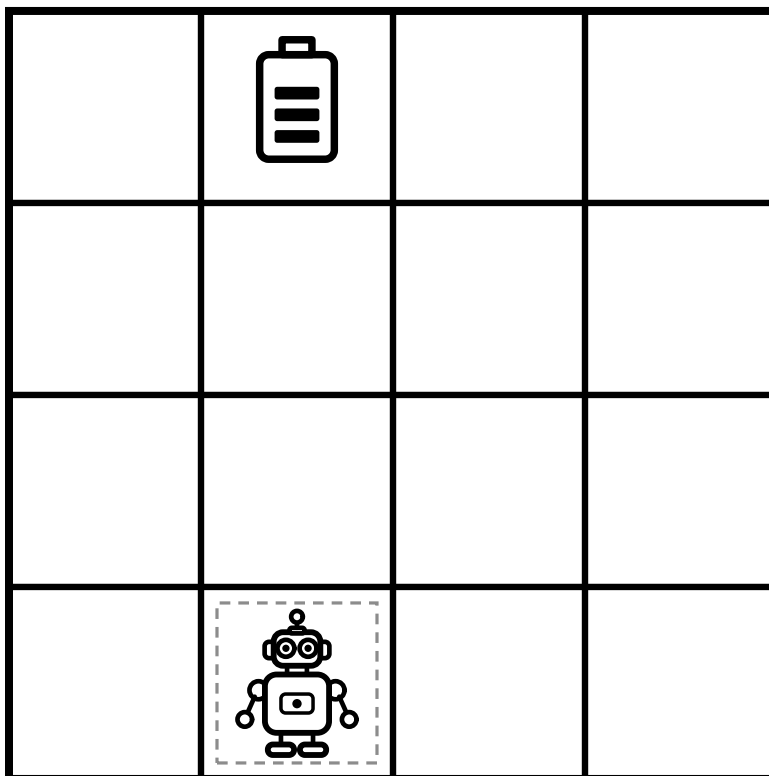
3

ARROWS

- ▲ up
- ▶ right
- ◀ left
- ▼ down

GRID

Draw a line through the squares the robot visits.



☐ I marked the square.

FOR GROWN-UPS

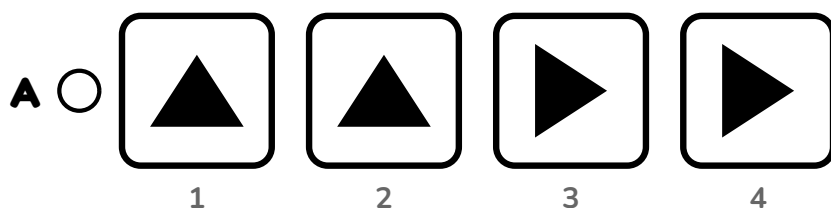
Let them draw a circle on the landing square.

Ask: how many squares did the robot move?

Three arrows in a line. Count the boxes, then move that many squares.

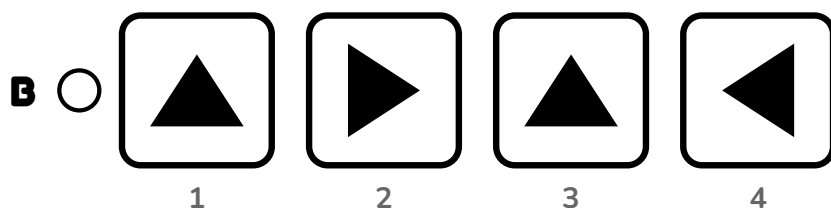
Circle the code that works.

Read each code. Circle the one that lands on the battery.



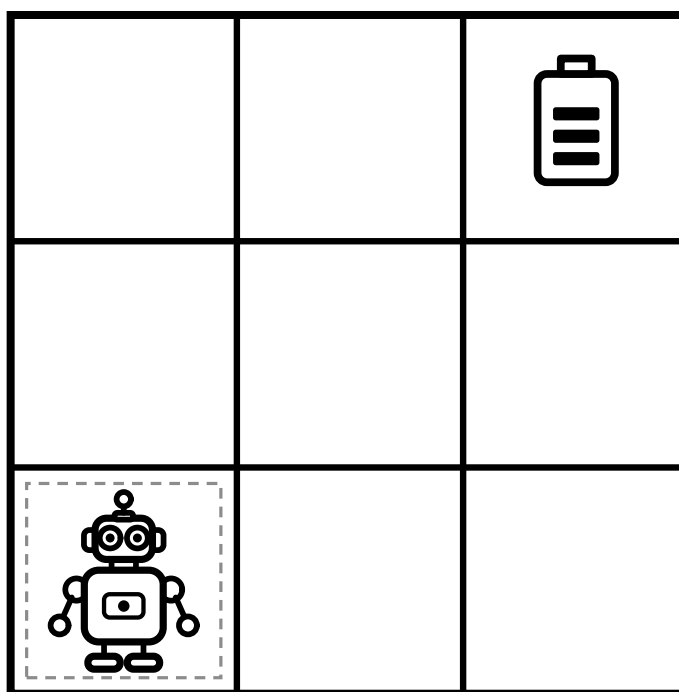
ARROWS

- ▲ up
- right
- ◄ left
- ▼ down



GRID

Draw a line through the squares the robot visits.



○ I circled the code that works.

FOR GROWN-UPS

Only one code lands on the battery. The others are close.

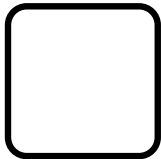
Let them trace each code with a finger before circling.

Ask: how did you know that code would work?

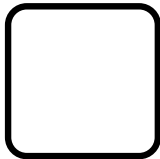
Write the code.

Look at the path. Draw one arrow in each box.

CODE



1



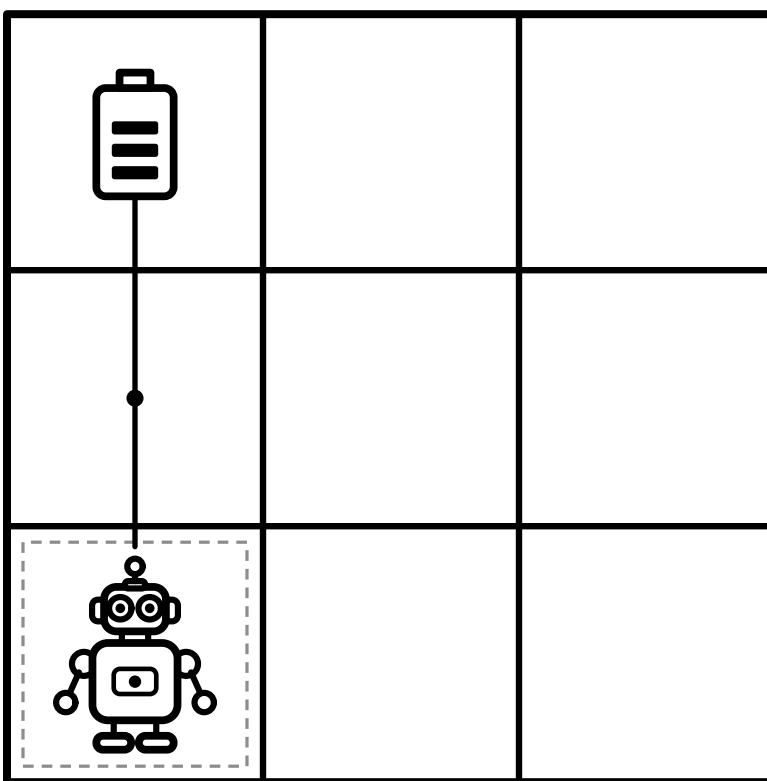
2

ARROWS

- ▲ up
- ▶ right
- ◀ left
- ▼ down

GRID

The path is drawn. Write the arrows.



☐ I wrote the code.

FOR GROWN-UPS

Let them write before you check. Then they can trace to confirm.

Ask: which arrow did you write first?

The path is drawn. Write one arrow for each square the robot moves.

Find the bug. Fix it.

There is an extra step at the end. Cross it out. Draw the fix.

CODE



1



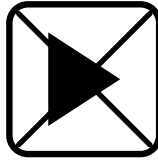
2



3



4

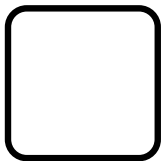


5

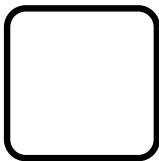
ARROWS

- ▲ up
- ▶ right
- ◀ left
- ▼ down

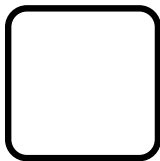
FIX



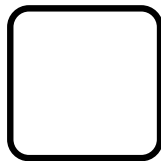
1



2



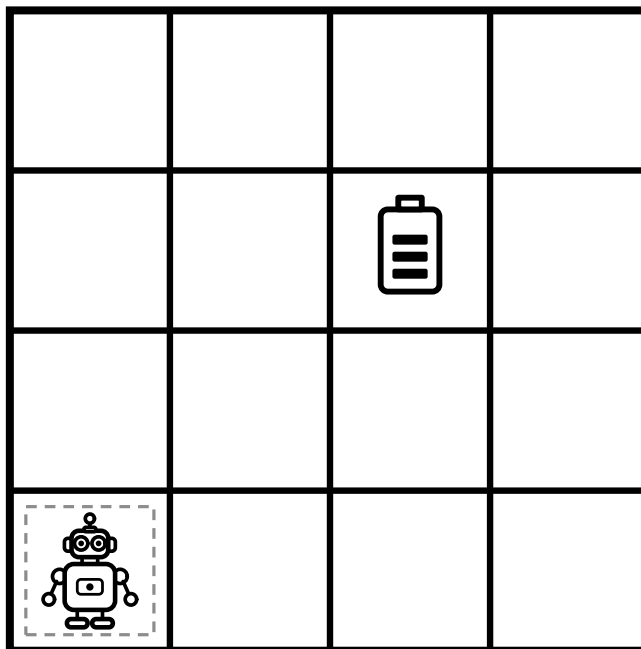
3



4

GRID

Draw a line through the squares the robot visits.



☐ I took out the extra step.

FOR GROWN-UPS

The first arrows are fine. The last one is the bug.

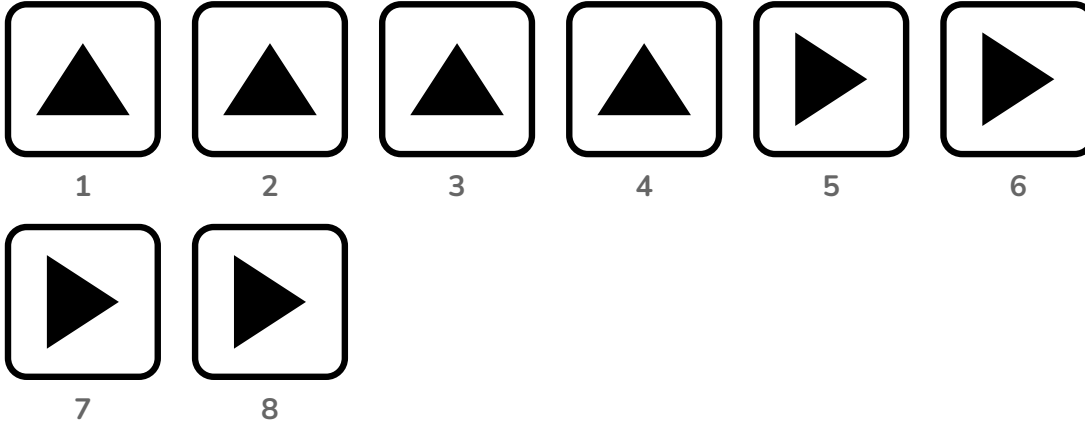
Ask: where does the robot land if you drop the last arrow?

There is an extra step at the end. Cross it out.

Make this code shorter.

This long code has two repeating parts. Write two loops.

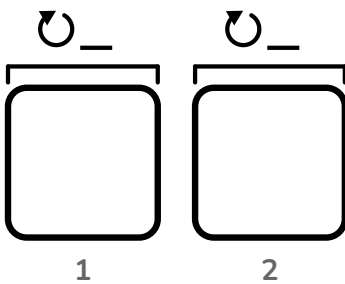
LONG



ARROWS

- ▲ up
- ▶ right
- ◀ left
- ▼ down

SHORT



☐ I wrote two loops.

FOR GROWN-UPS

The number is how many times to do the chunk inside the bracket.

Ask: how many times does that chunk happen in the long code?

Find the part that repeats. Write it once with a loop.

Draw both paths.

Left grid has an apple. Right grid does not. Draw each path.

ARROWS

▲ up

▶ right

◀ left

▼ down

CASE A

if apple: go right

▲

▶

▶

🍏		📋
🤖		

CASE B

if no apple: go up

▲

▲

📋		
🤖		

☐ I drew both paths.

FOR GROWN-UPS

Same code, two cases. Draw the path for each grid.
The diamond is the choice. The apple being there or not changes the path.
Ask: what is different between the two grids?