

**Robot**

# *CODE/BREAK*

*with the  
Root Coding Robot*



Root's friend Square is **hiding**, and we need your help to find them! Square has been sending us clues in the form of **code** and **puzzles**. Use your programming and math skills to crack the codes, collect answers, decode the mystery and **find Square**!

**You'll Need:** Activity Packet, a Root Robot, Root's Fold-out Whiteboard Grid, Dry-Erase Markers and a pencil.

Ideal for Grades 1-4

Name: \_\_\_\_\_

Grades 1-4



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# *CODE/BREAK*

*with the  
Root Coding Robot*

**You  
Need:**



Activity  
Packet



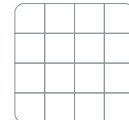
Root  
Coding  
App



Root  
Coding  
Robot



Dry Erase  
Markers



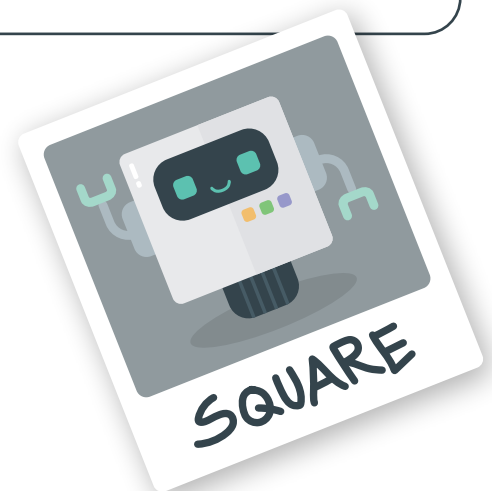
Fold-Out  
Whiteboard  
Grid



Pen/  
Pencil

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and we need your help to find them!

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form of **code** and **puzzles**. Use your  
programming and math skills to crack  
the codes, collect answers, decode the  
mystery and **find Square**!

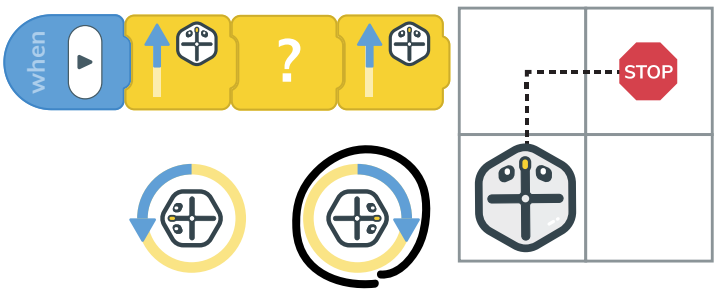


**Robot**

# Cause & Effect

**Turn Blocks** code Root to turn to the right or the left.

Circle the missing picture to make the code blocks match Root's path.



1.

2.

3.

4.

5.

All done? Nice work! Next, write the letters next to the pictures you circled into the number spaces below.

Code #1

1

2

3

4

5

Have you found the letters? Turn to page 8 to write the code in the spaces beside Code #1.

# Treasure Map

You'll Need:



1. COPY this code.

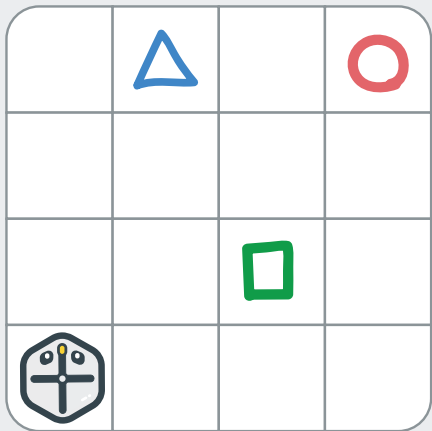
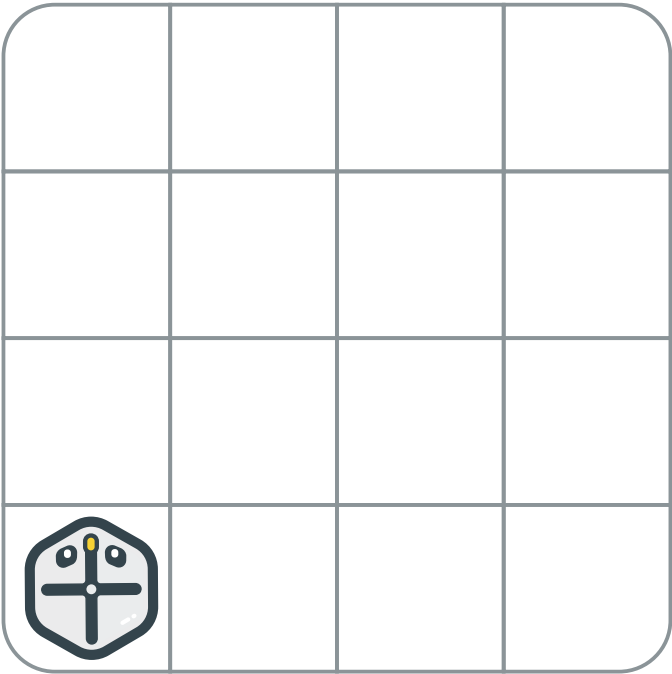





2. PUT Root on your Grid.


3. Press PLAY. Watch Root MOVE.

4. DRAW an “X” where Root stops.

5. Follow the directions BELOW.



-  If Root stopped here, the answer is “**J K P**”
-  If Root stopped here, the answer is “**N F R**”
-  If Root stopped here, the answer is “**A H R**”

  
**Code #2**

1

2

3

Have you found the letters? Turn to page 8 to write the code in the spaces beside Code #2.

# Robot Dots

Root can draw while it drives when you use the Marker Block!



Connect the dots to see what Root is trying to say, then follow the directions below!



Which word was Root spelling with dots? Circle the correct word and then write its bold letters in the Code Key.

**A N C.** “hello”    **K I F.** “perfect”    **J L D.** “my name is Root”

  
**Code #3**

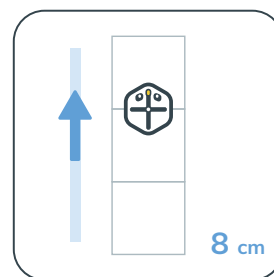
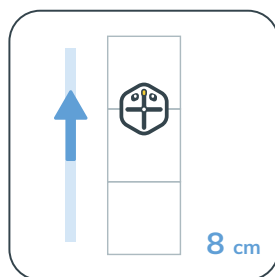
— — —

Have you found the letters? Turn to page 8 to write the code in the spaces beside Code #3.

## You'll Need:



PLACE Root on the grid.  
COPY the code.  
PRESS Play.  
WATCH Root Move.  
WRITE letter in the box.  
ERASE the grid.  
REPEAT.



With this code, Root drew the letter:

7

A 5x5 grid with a blue arrow pointing to the cell containing a black octagon with a white cross and a small yellow circle.



With this code, Root drew the letter:

7

A 5x5 grid with a blue arrow pointing to the cell containing the number 8.



With this code, Root drew the letter:

7

## Code #4

1

2

3

4

# Robot Vision

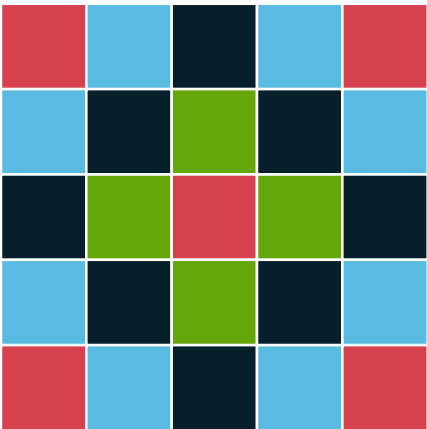
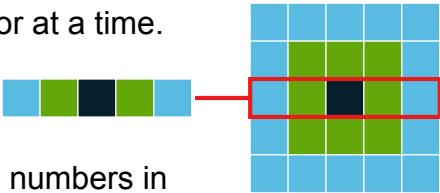
You'll Need:



With its Color Sensor, the Root Robot can see 1 ROW of color at a time.

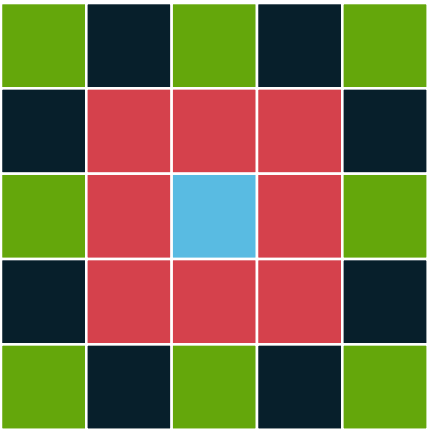
MATCH the rows to their pictures.  
There will be one row left over.

When you are finished, write the letters above their matching numbers in the Code Key box.

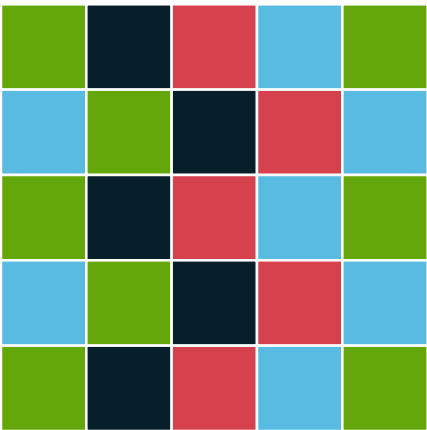


Write Letter Here!

1



2



3

Code #5

1 2 3

Have you found the letters? Turn to page 8 to write the code in the spaces beside Code #5.

C

B

I

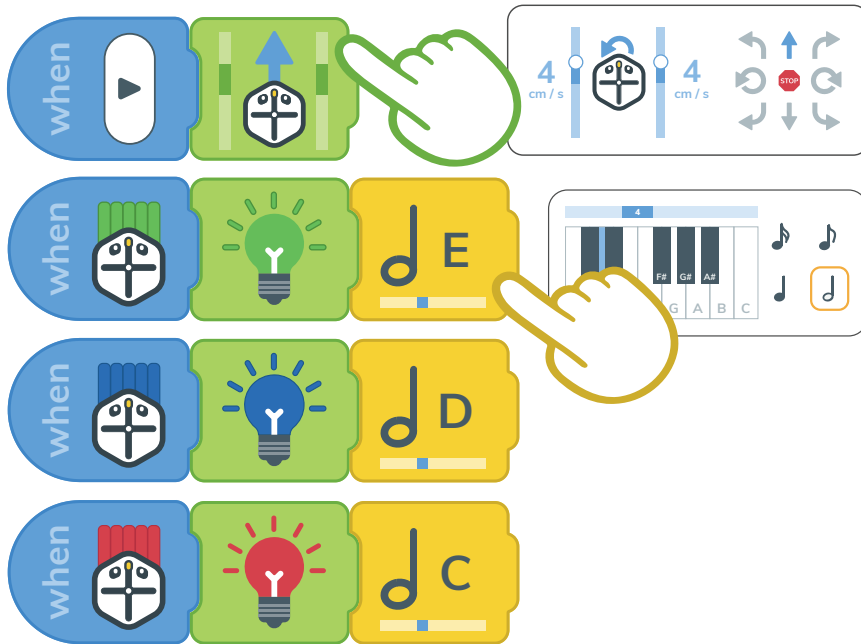
O

# Mystery Melody

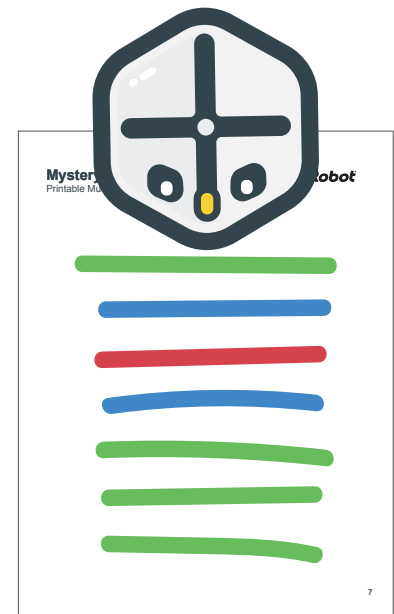
You'll Need:



1. COPY the code below into a blank coding project.



2. PLACE Root on the Mystery Melody Printable Music Sheet.



3. Press PLAY and LISTEN.

4. Circle the song's name in the Melody Machine. WRITE its letters in the Code Key.

Melody Machine

Which song was Root playing?

**T Y.** Mary Had a Little Lamb

**W O .** Old Macdonald

**S E.** The Star-Spangled Banner



Code #6

— —

Have you found the letters? Turn to page 8 to write the code in the spaces beside Code #6.



# Mystery Melody:

Printable Music Sheet





Code #1: \_\_\_\_\_

Code #2:    \_\_\_\_\_

Code #3:    \_\_\_\_\_

Code #4: \_\_\_\_\_

Code #5:    —    —    —

Code #6: \_\_\_\_\_

## Where is Square hiding?

\_\_\_\_\_

Code #1

\_\_\_\_\_