Challenge #1

LIGHT UP AND SCOOT
  Time Needed: 5-10 minutes
  Extra Material:

YOUR GOAL:

  Code your ozobot to show one light effect and one motion effect.

WHAT YOU NEED TO KNOW BEFORE STARTING:
- Make sure you have selected "bit" and level 2

HINTS:
- Click on "flashing" to start the loading process.
- Click the button on your ozobot once.
- Put the ozobot on the white ozobot shape on your screen.
- Click "load bit" and hold the ozobot steady.
- Ozobot flashes green when it's loading properly.
- Double click the button on the ozobot to show the code you made.

FOLLOW UP:
- Switch roles so you have a new coder and a new loader. Delete your first code and make a new "light up and scoot" code.

Ozobot Block Coding challenge cards.docx

Ozobot Block Coding
Challenge Cards

Tech Up↗

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Challenge #2

THE REPEATER
 Time Needed: 5-10 minutes
 Extra Material:

YOUR GOAL:

Code your ozobot to repeat its moves 4 times.

WHAT YOU NEED TO KNOW BEFORE STARTING:
 • Change roles so you have a new coder and a new loader.

HINTS:
 • Look in the Loops section to find useful blocks.
 • Start with a small number of blocks.

FOLLOW UP:
 • What happens when you use the "repeat forever" block?
 • What happens if you have two loop blocks linked together?

Challenge #3

SQUARE DANCE
Time Needed: 5-10 minutes
Extra Material:

YOUR GOAL:

Code your ozobot to move in a square.

WHAT YOU NEED TO KNOW BEFORE STARTING:
- Change roles so you have a new coder and a new loader.
- Delete your old code and start fresh.

HINTS:
- When the ozobot gets to a corner, how far should it turn?
- A square has four sides. Can you use a loop block to help you?

FOLLOW UP:
- How can you change your code to make the ozobot move in a rectangle?
- Can you code your ozobot to move in a triangle?

Challenge #4

FROM HERE TO THERE
  Time Needed: 5-10 minutes
  Extra Material: pencil and paper (8.5 x 11 or bigger)

YOUR GOAL:

  Code your ozobot to start at "1" and visit three more places.

WHAT YOU NEED TO KNOW BEFORE STARTING:
  • Change roles so you have a new coder and a new loader.
  • Loader: make four circles on the paper and label them 1,2,3,4.

HINTS:
  • Start simple: figure out the code you need to get from 1 to 2.
  • Ozobot measures distance in steps. How many centimetres is 10 ozobot steps?

FOLLOW UP:
  • Change roles, and make code to start at 4 and travel to 3,2,1.

Challenge #5

SHOW OFF YOUR MOVES
Time Needed: 10 minutes
Extra Material: scrap paper and pencil (optional)

YOUR GOAL:

Create a 10 second (or more) Ozobot dance.

WHAT YOU NEED TO KNOW BEFORE STARTING:
- Your code must use no more than 10 blocks
- You must use one block from each category (movement, light effects, timing, and loops)

HINTS:
- Loops will help make your dance longer without adding a lot of blocks

FOLLOW UP:
- Can you follow the ozobot instructions and dance along with it?