

# Spheros Introduction Group Activities



We won't complete all of the following problems.

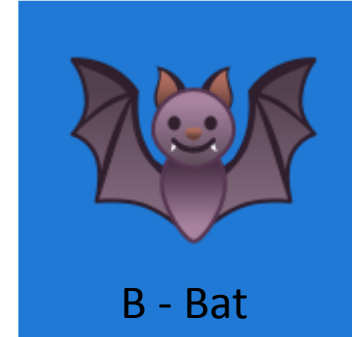
Your group will only complete one or two.

Start with Alligator. After you are done, we will discuss which one you should do next.

Problem  
1



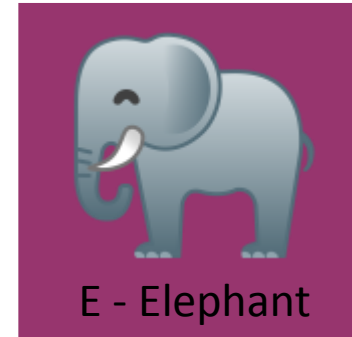
Practice



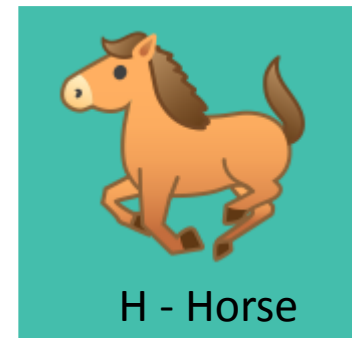
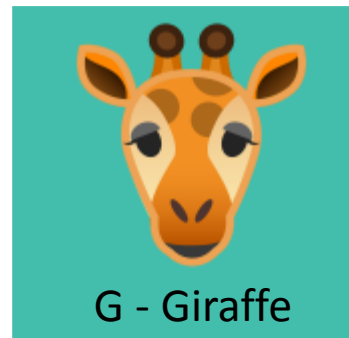
More  
Practice



Problem  
2



Problem  
3



TIPS

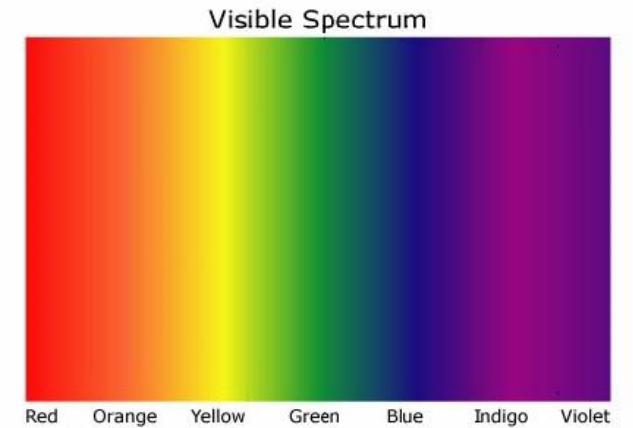


J - Jaguar



Write a program that makes the light gradually change in a rainbow pattern: ROY B GIV.

Test it on your Sphero.



This can be done in at least two ways, so once you have coded it one way, consider doing it again using different blocks.

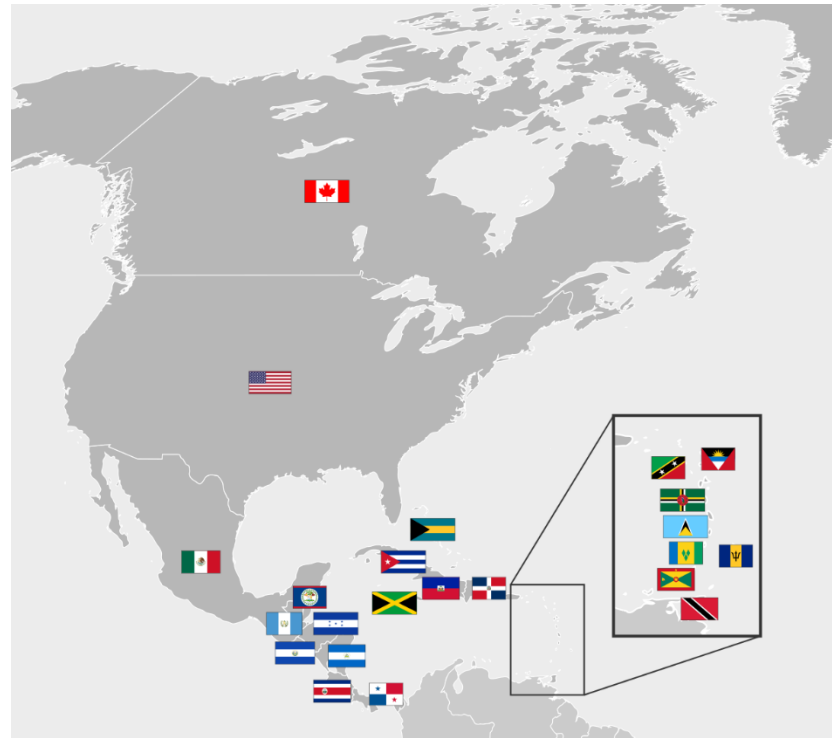


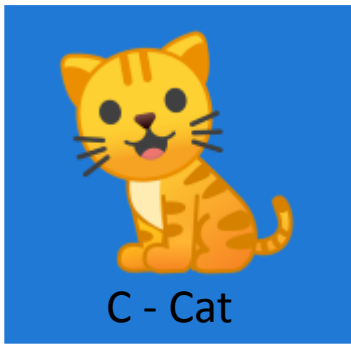
B - Bat



Choose a flag for each of your team members.  
Write a program cycles through the colours of  
each country's flag.

Test it on your Sphero.





Write a program that says  
“Hello world!”, then makes  
an applause sound, then  
says “How are you?”

Test it on your Sphero.



D - Dog



Write a program plays 4 different sounds. Each sound should have a different light to go with it. You should be able to hear each sound distinctly.

Test it on your Sphero.



E - Elephant



Write a program that uses Morse code to signal SOS either both lights and sounds.

Test it on your Sphero.

... — — — ...

S O S

## MORSE CODE

A ··-	J ·- - -	S ...
B -···	K -·-	T -
C -·-·	L ·-··	U ··-
D -··	M - -	V ···-
E ·	N -·	W ·- -
F ····	O - - -	X -·-·
G - - ·	P ·- ··	Y - - - ·
H ····	Q - - · -	Z - - ··
I ··	R ·- ·	



F - Fish



Write a program that makes a makes noises to simulate the chaos of a farmyard. Many sounds and lights should play at once.

Test it on your Sphero.



G - Giraffe



Write a program that allows the Sphero Mini to travel in an “L” shape.

Test it on your Sphero.





H - Horse



Write a program that makes the light change back and forth between red and yellow repeatedly.

Test it on your Sphero.

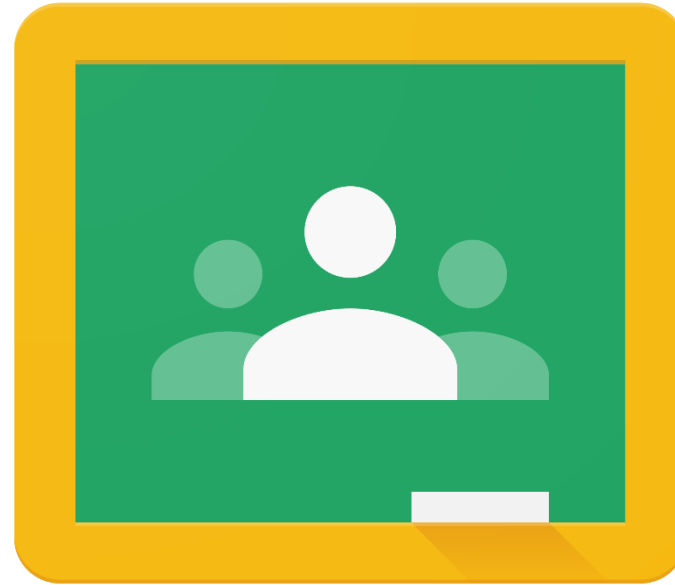
If you do this in a clever way, you can repeat the steps forever – or until you stop the program!



Write a program that allows the Sphero to travel in a square shape. Make each side of the square light up in a different colour.



When you are done,  
there are check-your-  
understanding  
questions on Google  
Classroom.



# Google Classroom