

# Pioneer Express Scouting Adventures Online!



# Codes & Counting

Zoom Naming Convention: First Name/Rank/Pack (Joe Bear 402)

# Gathering

## Share your Lego Robot



- Does it have a name?
- What does it do?
- Did you have fun making it?

0:00 – 0:10 Gathering Activity – *Cubs share the Robot challenge. (Alternative if there isn't enough response, is to play Hangman using "Things you can do with your hand" using zoom whiteboard.) Remind about Zoom naming convention*

# Pledge of Allegiance



0:10-0:13 Pledge, Oath and Law (slides 3-5)

*Ask one Scout to recite pledge while everyone else is on mute and saying it with the Scout*



# Scout Oath

On my honor I will do my best  
To do my duty to God and my  
country  
And to obey the Scout Law;  
To help other people at all times;  
To keep myself physically  
strong,  
Mentally awake, and morally  
straight.



0:10-0:13 Pledge, Oath and Law (slides 3-5)

*Ask one Scout to recite Oath while everyone else is on mute and saying it with the Scout*

# Scout Law

A Scout is trustworthy,  
loyal, helpful, friendly,  
courteous, kind,  
obedient, cheerful,  
thrifty, brave, clean and  
reverent.



0:10-0:13 Pledge, Oath and Law (slides 3-5)

*Ask one Scout to recite Law while everyone else is on mute and saying it with the Scout*



# Scouting Adventures Online!



## Episode 3



# Codes & Counting

0:13 – 0:15 Introduce Episode 3 - *Tonight you will create and use a coding device, play some counting games and learn how math is all around you. Please make sure you have all the supplies that will be needed for this Adventure at the ready! (Give them time to gather the materials around them)*

# Codes

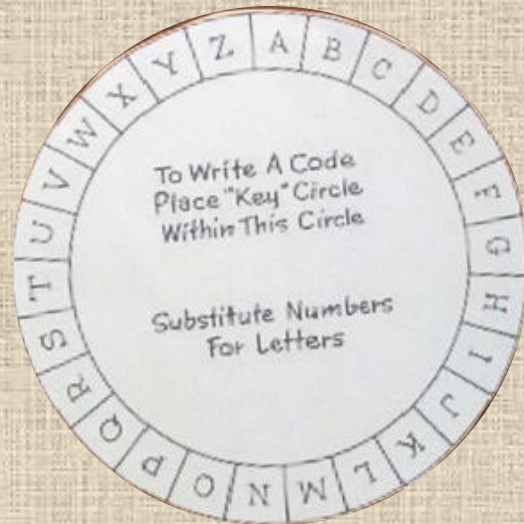
## Step 1 – Gather materials

- Print out of Code Wheel
- Piece of cardboard or construction paper
- Glue or tape
- Small fastener to hold wheel together (optional)
- Scratch paper and pencil

0:15 – 0:16 Coding - *Discuss items they should have with them. There are lots of different types of codes, this one uses numbers for letters.*

# Codes Step 2

- Cut out both pieces of Code Wheel
- Glue or tape them to a piece of cardboard or construction paper
- Cut out wheels



0:16 – 0:19 Coding - *Lead them through the cutting and mounting of the wheels. If they don't have the document to cut out, tell them they can use the picture of the completed Code Wheel on the next slides.*



# Codes Step 3

- Using your small fastener attach the two parts of the wheel together



0:19 – 0:20 Coding - Guide them in fastening, and if there is no fastener they can just hold them together in one hand and spin with the other. See how there are 2 circles to the code wheel - one with letters and one with numbers. Each letter is represented by a number. This picture shows the code as “A equals 9”

# Codes Step 4

- Align the letter A with the number 9
- Figure out the following code:



21-9-2-16 17-1

9-20-20

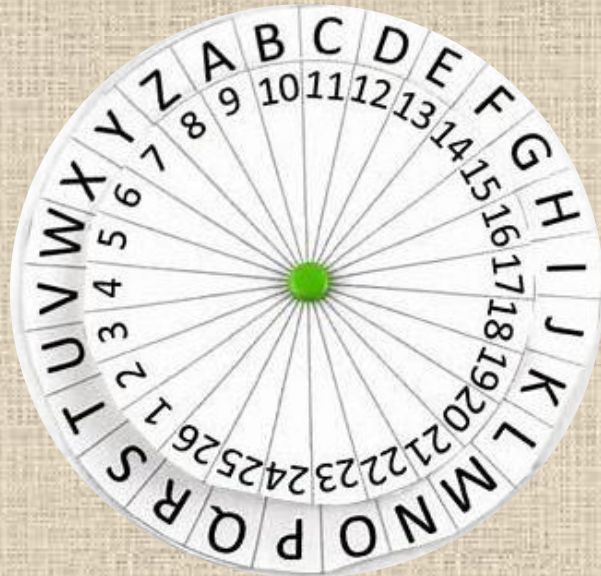
9-26-23-3-22-12

3-1!

0:20 – 0:30 Coding - Translate the coded message. Make sure the letter A is aligned with the number 9. Just substitute a letter for each number. The first number is 21, so what letter would that be? Now find the letter for each of the next numbers. What is the secret message? Answer: MATH IS ALL AROUND US!

# Codes Step 4

- Align the letter A with the number 9
- Figure out the following code:



11-3-10

1-11-23-3-2-17-22-15

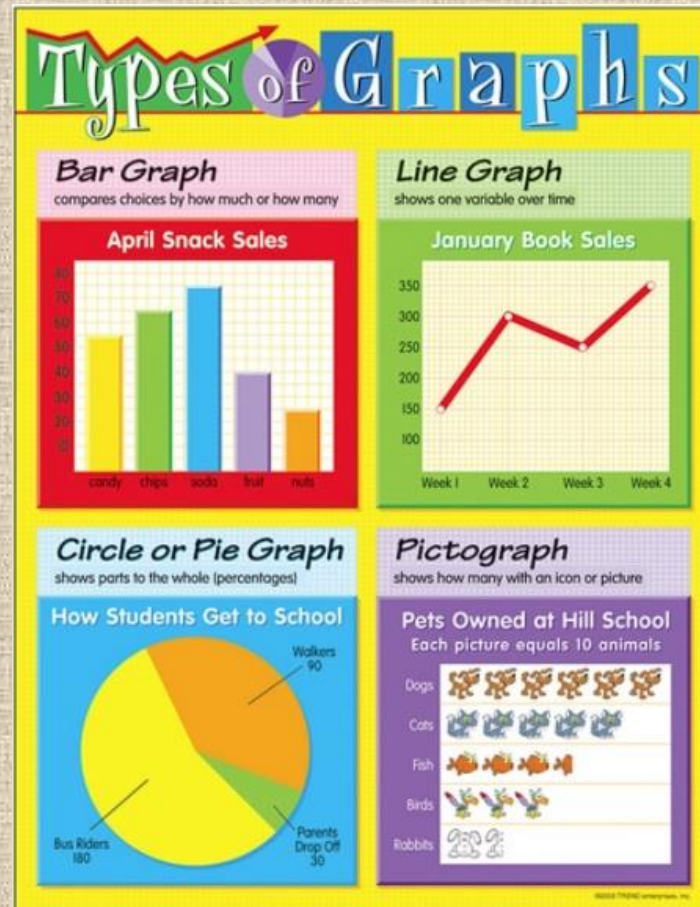
17-1 14-3-22!!

0:20 – 0:30 Coding - *Here's a second message using the same code. (If there is time, you can do this additional code.) Answer: Cub Scouting is fun!!*

*We use math everyday. There are other ways we use numbers, not just in codes.*



# Types of graphs



0:30 – 0:33 Graphs - We use graphs to see what numbers are telling us. Here are 4 kinds of graphs. Describe the 4 graphs. We will be making our own graph tonight.

# Counting Game

## Gather materials

- M&M's or Skittles fun size package (or 48 pieces of items of multiple colors)
- A plate or shallow bowl to hold items
- A piece of lined paper
- Ruler or straight edge
- Colored pencils, crayons or markers

0:33 – 0:45 Counting Game & Graphing - *if you don't have a fun pack of candies, grab and count 48 pieces of different colored candy. Don't eat any, yet!*



# Counting Game

Empty your candies or colored items onto a plate or bowl & separate colors

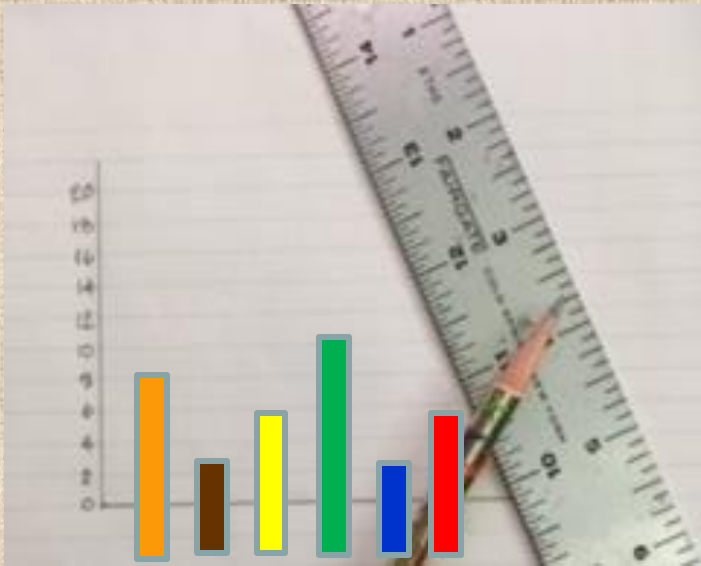


0:33 – 0:45 Counting Game & Graphing - *Pour out your candies onto a plate and sort them by color. How many colors do you have? Don't eat your candies, yet!*



# Counting Game

Count the number of each color and chart the number of each color, and....



Share your graph!

0:33 – 0:45 Counting Game & Graphing - *Now you need to make your graph to show your math – how many of each color you have. Make a column for each color. Turn off slide share after giving them the instructions so the Scouts can share their graphs.* Reflection: Ways in which you use math: # of forks when setting the table, getting change at store, figuring hours until bedtime, ...

# Recycle Bowling



0:45 – 0:47 Recycle Bowling - Play a game of at home. Keep track of scores by adding up the value of each bottle knocked over as a way to use math. You can also use paper airplanes and try to land on targets of various values.



# Diceopoly



0:47 – 0:53 Diceopoly - *Show them how to play and suggest they play at home with their family. Use a bowl or vase filled with Duplo's or Lego's, a base plate and a large die. Roll the die and pull one brick with that number of bumps (or two that equal that number). Either build on the base or take away from those attached to the base. Use math to keep score for who put on or removed the most bumps.*



# Challenge at Home

Send a coded message to a friend or family member and have them send a coded reply.



Learn The Pigpen Cipher

This is a very old code that is easy to write.  
Can you work it out?

A	B	C	J	K	L
D	E	F	M	N	O
G	H	I	P	Q	R

S	W
T	X
U	Y
V	Z

0:53 – 0:54 Challenge at Home - *Send a coded message to a friend or family member . You can change the letter to number match or create your own code. Have them send a reply. Be sure to send them the key!*

# Upcoming September 16

## Bugs with the Bug Lady



### Supplies:

- 4 oz Elmer's white glue
- Warm water
- ½ tsp Baking Soda
- 1-3 tbsp Saline solution
- Food coloring
- Glitter

0:54 – 0:55 Our Next Adventure - *Learn about germs and the marvels of mucus, phlem and slime. During this adventure, you will be able to make your own batch of slime.*



# Closing



0:55 – 0:60 Closing remarks & Do Your Best - *Next meeting date. Update ScoutBook with Completed Requirements. Don't forget to always Do Your Best!*

Finish up with American Sign Language Sign "Do Your Best" - *Do in ASL.*

<https://www.youtube.com/watch?feature=share&v=Y9Cfop7ZGBw&app=desktop>