

PARENT NOTES: Codes and Ciphers!

CIPHER WHEEL



Today we learned how to make a compass out of two pencils and used it to draw very accurate circles. We then used geometry to divide circles into evenly spaced segments. We then used this new skill to make a cipher wheel to send coded messages.

ASK YOUR CHILD

What did you make today?

(A cipher wheel to make and break codes)

How does it work?

(You decide what your key is by moving the two circles so that the letters don't line up. Then keeping the alignment the same you look up the letters of your word in the inner circle then read and transcribe them off the outer circle. This will produce a coded message that can only be solved by giving the key and cipher wheel to a trusted source)

How did you draw your circle and what are the different parts of a circle called?

(Made a compass from pencils, which can be set to different lengths, then used that to draw a circle. The edge of a circle is called the circumference, the distance from the edge to the centre is the radius, and the distance between opposite points on the edge is called the diameter).

Why do you think making codes might be useful?