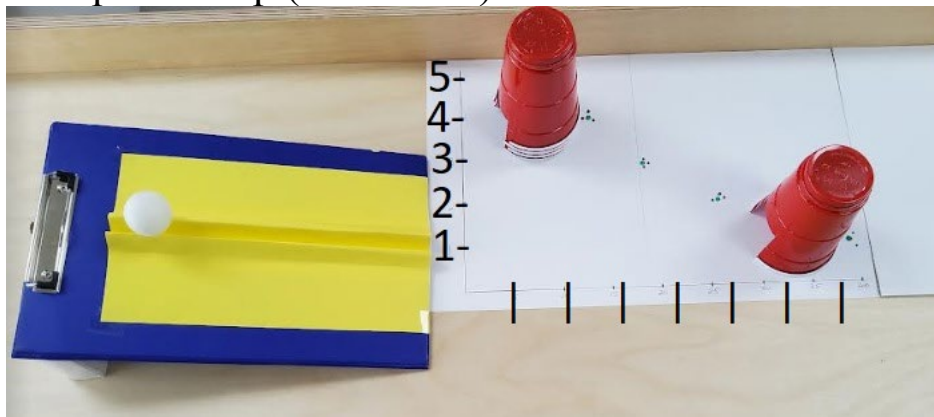# Real Graphs

What you need
Ball
Plastic cups x5
Scissors
Ramp (with chute)
Pen & paper

Set up the ramp (with chute) at a suitable incline.

Put a large page on a table.
Draw the scale and label the axes as shown

Horizontal axis shows the distance travelled by red cups (centimeters).
Vertical axis shows the number of cups stacked on top of each other.

Cut the same size opening in each cup.
Place the ramp on the table at the edge of the page.

Release the ball from the top of the ramp each time.
Record how far the cup moves each time by a dot on the page.

Vary the number of cups that are stacked.
Conduct several trials for each "number of cups".

Record the average distance moved (green dot).

Observe the outcome which is an example of a graph from real data.