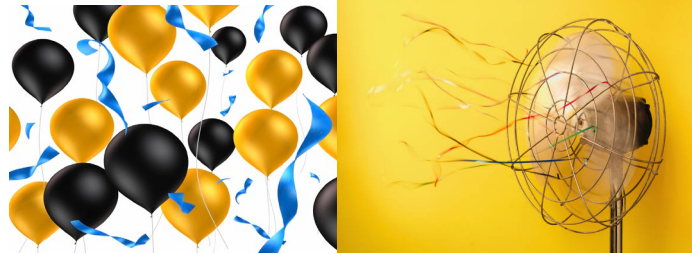


SURFACE AREA OF A SPHERE

INVESTIGATION

BALLOON AIR RESISTANCE



REQUIREMENTS

Balloons, ruler

BALLOON	DIAMETER	SURFACE AREA	DISTANCE (1 ST ATTEMPT)	DISTANCE (2 ND ATTEMPT)	DISTANCE (3 RD ATTEMPT)	DISTANCE (AVERAGE)
A						
B						
C						
D						
E						
F						
G						
H						
I						
J						

INSTRUCTIONS

- Blow up ten round balloons to different-sized diameters.
- Measure the diameter and record into the table below.
- Calculate the Surface Area of each balloon. (SA of Sphere = $4\pi r^2$)
- Record this in the table.
- Set up a fan on a table top.
- Hold each balloon against the same fan and let go.
- Measure the distance travelled by each balloon till it lands on the table top and record in the table.
- Make a scatterplot comparing the Surface Area against Average Distance (Surface Area on x-axis and Average Distance on y-axis)
- Is there a relationship between the surface area of the balloon and the distance travelled?