

AGENDA

- Quick write
- Demonstration
- life raft graph

Exit Goal

Complete the life raft drop graph..

Quick Write:

- In your journal explain why objects fall and..
- describe the motion of a falling object.



Figure 1

Learning target: I can explain why an object falls and the relationship between force and mass.

Gravity as an interaction



Figure 1

The force of gravity is one of four fundamental forces in the universe. The force of gravity is an **interaction** between two masses.

The strength of the force of attraction depends on the masses of the interacting objects.

What tool can we use to measure the force of gravity?

Learning target: I can explain why an object falls and the relationship between force and mass.



Use these tools to find out what you can about the force of gravity.



Figure 1

1. What is the mass of 1 cube? (g)
2. With how much force is one mass pulled to the earth?
3. With how much force are 2 masses pulled?
4. What is the relationship between mass and force of gravity?
5. what is the ratio between the mass of the object and the force exerted by gravity? (? : 1)

Learning target: I can explain why an object falls and the relationship between force and mass.

Gravity is a force.

The force of gravity is always acting on every mass on or near earth. The force of gravity pulls masses towards each other. Objects move towards the center of the earth if no other force opposes the force of gravity.

When gravity exerts the only force on the object we call the resulting action falling.



Figure 1

Learning target: I can explain why an object falls and the relationship between force and mass.

Write the Q and H in your journals.

How does the mass of a sphere affect how fast it falls?

Hypothesis:



Figure 1

Was your hypothesis correct?

Learning target: I can explain why an object falls and the relationship between force and mass.