



Activity 8: Defying Gravity

Question

How can the force of gravity be overcome?

Resources

Access the website links from the online course or click on the links.

- [Buoyancy](#)
- [4 Forces of Flight](#)

Instructions

Complete the following:

- 1 Read the questions in the **Basics of Gravity Chart** located on the following page. These questions will help you focus on the important information provided on the website.
- 2 Complete the "Basics of Gravity" section on your worksheet as you read carefully through the **Buoyancy** and **4 Forces of Flight** websites.
- 3 In the second section of your worksheet, read the examples of ways to overcome gravity.
- 4 For each example, check which method of overcoming gravity is being shown: lift, buoyancy, or propulsion. In some cases, more than one may be involved.
- 5 Check your answers using the **Check Your Answers** on the following webpage in the course content.

Basics of Gravity Worksheet

Basics of Gravity	
In which direction does gravity pull?	
How can a balloon float in air?	
How can you float in water?	
How can an airplane float in air? (Name the extra force needed.)	

		Lift	Buoyancy	Propulsion
1	bird wings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	inner tube floating on water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	jet engines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	hand gliders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	paper airplane	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	hot air balloon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	rocket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	boat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	helicopter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>