 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](https://www.youtube.com/watch?v=jRLsEjpGNe8)

 [4 Forces of Flight](https://www.youtube.com/watch?v=Vqg2uDYOyTA)

**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.)**

**1** bird wings

**Lift Buoyancy Propulsion**

**2** inner tube floating on water

**3** jet engines

**4** hand gliders

**5** paper airplane

**6** hot air balloon

**7** rocket

**8** boat

**9** helicopter