Building Blocks of Science: Gravity

Find under **Nature and Science**

1. **What is gravity?**
2. **What would happen if there was no gravity?**
   The strength of gravity is dependent on two things. What are they?
   Complete the statements:
   i) **The further the distance between two objects the _____ the pull of gravity between them.**
   ii) **The _____ the mass an object has, the more it pulls on objects around it.**
3. **Explain why your body is pulled toward the Earth?**
4. **How is gravity measured?**
5. **What do scientists use to measure gravity?**
6. **What has a stronger pull of gravity?**
   a) **Elephant**
   b) **Mouse**
7. **Why would you weigh less on the moon than you do on earth?**
8. **Why does a hammer fall faster than a feather when dropped?**
9. **What is friction?**
10. **What factors determine how fast or slow an object will fall through matter?**
11. **What happens to friction in space?**
12. **Explain the idea of inertia?**
13. **Compare what would happen to a soccer ball if you kicked it in space compared to kicking it on Earth?**
14. **Explain the differences between what happens to the soccer ball in space and on Earth.**
15. **How does the sun's gravity affect the planets?**
16. **What stops planets from crashing into the sun?**
17. **How does the moon's gravity affect Earth?**
18. **How do scientists believe gravity played a role in the formation of the sun and the planets?**
19. **How do black holes form?**
20. **Why are black holes considered the most violent and powerful objects in the universe?**