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| Stories |
| Still the only one |
| Some size of parachute |
| Fast fall |
| It is not easy |
| Ship shape |
| Well oiled |

1. Why did Concorde have tiny wings?
2. What's unusual about the parachute that slows down the re-entry module?
3. What force is therefore much bigger than with a normal parachute?
4. Which force increases a skydiver's speed?
5. Which force reduces the speed?
6. How many Earths could you fit into the Sun?
7. What makes the Sun especially fascinating, according to Lyndsay?
8. What is her job?
9. What causes all the interesting activity on the sun's surface?
10. What happens if you put a big lump of metal into water?
11. In what direction does the weight force act?
12. In what direction does the buoyancy force act?
13. How do you increase the buoyancy of a piece of metal - or any other material?
14. State one advantage of water over oil in machines.
15. What is the point of oil?
16. What happens to a machine without oil?
17. If you turn the water off on a water slide, what rubs against what?
18. What effect does that have?
19. Which force is stopping you from sliding down?
20. When you turn it back on, what does the water do to stop you and the slide from rubbing against each other?
21. How does oil in a machine work?
22. What's the word for a substance that reduces friction?
23. Can you guess why water is not used as a lubricant in machines? (We will tell you in a later story.)

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| Stories |
| Slide speed |
| What sank the Titanic? |
| Weighty matters |
| Weighty matters (part 2) |

1. What force sank the Titanic?
2. What force kept the Titanic afloat for the first four days of its voyage?
3. In what direction does that force act?
4. Which forces are equal and opposite when a ship floats?
5. What's an 'easier' way to lose weight than diet and exercise?
6. The amount of matter in your body is its ----.
7. The force of gravity on your body is its ------.
8. Only one of these changes when you go to another world - which one?
9. Why do you weigh slightly less at the top of a mountain?
10. Why is your weight on the Moon only a sixth of what it is on Earth?
11. Have a go at finding your weight on other worlds and tell us what you weigh on the Sun.

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| Stories |
| Balanced forces |
| Straight to the bottom |
| The bigger the pull |
| Free fall |

1. Where did Percy Pilcher work?
2. What's the name of the force that slows an aircraft down?
3. What's another name for it?
4. What two forces need to be equal to keep a steady speed?
5. What two forces need to be equal to keep a steady height?
6. If two forces are equal, but act in opposite directions, we say they are -------- forces.
7. If you attach an engine to a glider, more what is needed?
8. For four days the weight and buoyancy on the Titanic were what?
9. What does the size of the buoyancy force depend on?
10. What happened to Titanic when the weight of the ship plus the water on board were greater than the buoyancy force?
11. What force makes you fall when you trip?
12. Everything in the universe pulls on everything else with the force of -------.
13. The larger the object, the bigger the ----.
14. Why don’t you float away on Earth?
15. Where would you be really weightless?
16. Why are you not really weightless on the Space Station?
17. Astronauts on the Space Station seem weightless because they are in ---- -----.

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| Stories |
| Are they weightless? |
| Why not water? |
| Light show |
| Free fall |
| Light show |

1. Astronauts float around the Space Station as if they were what?
2. Weight is the force on your body from what?
3. The force of the Earth’s gravity is a bit less on the Space Station, but not ---- less.
4. What are the astronauts doing, just like skydivers?
5. What’s the big difference between astronauts on the Space Station and a skydiver?
6. Why don’t the astronauts hit the Earth?
7. This is the same as a skydiver, so why doesn't the Space Station hit the Earth, like skydivers do?
8. Why isn't water used as a lubricant in machines instead of oil?
9. What does steel do when there’s water around?
10. What do the German scientists add to the water to make it conduct?
11. The steel becomes negatively charged which stops it doing what?
12. What is the main problem with the method at the moment?
13. Where do the light shows appear most often?
14. In two words what causes aurorae?
15. Where do they come from?
16. What is the energy of the particles converted into?
17. What type of force channels the particles towards the poles?

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| Stories |
| First bicycle |

1. Where were pedal-driven bicycles invented?
2. What is said to be the most efficient animal on Earth?
3. What you get out compared to what you put in is called what?
4. How much of the energy you put in do you get out from a car?
5. How much of the energy you put in do you get out from a bicycle?