Physical Weathering

The plastic bottle is filled with water and has been left in a freezer overnight.

1. Look carefully at the level of the water in the bottle. Record what you notice.
2. If rainwater collects in cracks in rocks and freezes, it will expand. What might happen to the rock?

Chemical Weathering

1. Put a teaspoon of bicarbonate of soda on your plate.
2. Use the dropper to carefully add a drop of vinegar to the top of the powder.
3. Look carefully at what happens to the powder.
4. Rain water is slightly acidic. What could happen if acidic rain falls onto rocks such as limestone?
5. Now, empty your plate into the bin and leave the equipment ready for the next group.

Biological Weathering

1. Look at the picture of the tree. What do you notice about its roots?
2. Look at the picture of the brick wall. What do you think might have caused this damage?
3. Look at the picture of the steps. Why do you think the centres are lower?
4. What do you think the plants growing on the stone cross are? How have they damaged the stone?

Erosion

1. Cover the board with a 1cm layer of sand. Use the straws to blow across the surface of the sand. Record what you see happening.
2. Use the block to raise up one end of the board.
3. Carefully use the jug to pour water down the middle of the sand layer. Record what you see happening.
4. Now, put the sand back into the container and leave the equipment ready for the next group.