Year 8 Science: The rock cycle, fossils, soil and using Earth materials

Name: _____ Date: _____

Try these without your notes first, then check the answer key.

Practice

1. A rock has large interlocking crystals. Is it more likely to have cooled quickly at the surface or slowly underground?

2. Which type of rock forms when limestone is changed by heat and pressure into marble?

3. Name the three processes, in order, that move a rock at the surface into a new sediment layer.

4. Why are fossils rarely found in igneous rock?

5. Why is aluminium chosen over steel for an aircraft body?

Fix the mistake

6. Correct this statement: "Metamorphic rock forms when rock melts and cools again."

7. Correct this statement: "The rock cycle always goes igneous, sedimentary, metamorphic in that order."

8. Correct this statement: "A fossil is the actual bone or shell of the animal."

9. Correct this statement: "Soil is just ground-up rock."

Answer key (for parents and tutors)

1. A rock has large interlocking crystals. Is it more likely to have cooled quickly at the surface or slowly underground?
   Slowly underground, which gives crystals time to grow large.
2. Which type of rock forms when limestone is changed by heat and pressure into marble?
   Metamorphic rock.
3. Name the three processes, in order, that move a rock at the surface into a new sediment layer.
   Weathering, erosion, then deposition.
4. Why are fossils rarely found in igneous rock?
   Igneous rock forms from molten rock, which would destroy any remains.
5. Why is aluminium chosen over steel for an aircraft body?
   It is strong but much less dense, so the aircraft is lighter.
6. Correct this statement: "Metamorphic rock forms when rock melts and cools again."
   Melting and cooling makes igneous rock; metamorphic rock is changed by heat and pressure without melting.
7. Correct this statement: "The rock cycle always goes igneous, sedimentary, metamorphic in that order."
   Any rock type can turn into any other, so there are many routes round the cycle.
8. Correct this statement: "A fossil is the actual bone or shell of the animal."
   In most fossils, minerals have replaced the original material, leaving a stony copy.
9. Correct this statement: "Soil is just ground-up rock."
   Soil also holds humus, living things, air and water, which is why it can grow plants.