Types of Rocks Worksheet

Name: ..... Date: .....

I. Multiple Choice Questions

Choose the best answer for each question.

1. **Which of the following is NOT one of the three main types of rocks?**
   a) Igneous
   b) Sedimentary
   c) Metamorphic
   d) Mineral

2. **Igneous rocks are formed from the cooling and solidification of:**
   a) Existing rocks under pressure
   b) Layers of sediment compacting together
   c) Molten rock (magma or lava)
   d) Plant and animal remains

3. **Which type of igneous rock cools slowly beneath the Earth's surface, resulting in large crystals?**
   a) Extrusive
   b) Intrusive
   c) Foliated
   d) Clastic

4. **Basalt is an example of a(n):**
   a) Intrusive igneous rock
   b) Extrusive igneous rock
   c) Chemical sedimentary rock
   d) Organic sedimentary rock

5. **Sedimentary rocks are formed from:**
   a) The melting and cooling of magma
   b) The breakdown and accumulation of other rocks and organic matter
   c) The transformation of rocks by heat and pressure
   d) Individual mineral crystals growing together

6. **Compaction and cementation are processes involved in the formation of:**
   a) Igneous rocks
   b) Sedimentary rocks
   c) Metamorphic rocks
   d) Minerals

7. **Which of the following is an example of a clastic sedimentary rock?**
   a) Limestone
   b) Rock salt
   c) Sandstone
   d) Marble

8. **Fossils are most commonly found in which type of rock?**
   a) Intrusive igneous rocks
   b) Extrusive igneous rocks
   c) Sedimentary rocks
   d) Foliated metamorphic rocks

9. **Metamorphic rocks are formed from:**
   a) The cooling of lava at the Earth's surface
   b) The accumulation of sediments in layers
   c) Existing rocks that have been changed by heat and pressure
   d) The crystallization of minerals from a solution

10. **Which of the following is an example of a foliated metamorphic rock?**
    a) Quartzite
    b) Marble
    c) Slate
    d) Conglomerate

II. Fill-in-the-Blank Questions

Fill in the blank with the correct term.

11. Molten rock found beneath the Earth's surface is called _____.

12. The type of sedimentary rock formed from the remains of once-living organisms is called _____ sedimentary rock.

13. The process by which existing rocks are broken down into smaller pieces is called _____.

14. The Earth's crust is made up of _____.

15. The movement of sediment from one place to another is called _____.

III. Short Answer Questions

Answer the following questions in complete sentences.

16. **Briefly describe the rock cycle and the processes that drive it.**

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17. **Explain the difference between intrusive and extrusive igneous rocks, and provide one example of each.**

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18. **Describe two different ways that sedimentary rocks can form.**

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19. **How does heat and pressure change an existing rock into a metamorphic rock?**

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20. **Imagine you find a rock with visible layers of different-sized pebbles cemented together. What type of rock is it likely to be, and how did it probably form?**

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Tectonic Plates Activity Sheet Answer Key

1	d) Mineral
2	c) Molten rock (magma or lava)
3	b) Intrusive
4	b) Extrusive igneous rock
5	b) The breakdown and accumulation of other rocks and organic matter
6	b) Sedimentary rocks
7	c) Sandstone
8	c) Sedimentary rocks
9	c) Existing rocks that have been changed by heat and pressure
10	c) Slate
11	magma
12	organic
13	weathering
14	rocks
15	erosion
16	The rock cycle is a continuous process that describes how rocks change from one type to another over geological time. The driving forces behind the rock cycle are heat from the Earth's interior and the processes of weathering, erosion, deposition, compaction, cementation, melting, and metamorphism.
17	Intrusive igneous rocks form when magma cools slowly beneath the Earth's surface, allowing for the growth of large crystals (e.g., granite). Extrusive igneous rocks form when lava cools quickly at the Earth's surface, resulting in small crystals or a glassy texture (e.g., basalt).
18	Sedimentary rocks can form through the accumulation and cementation of fragments of other rocks (clastic sedimentary rocks, like sandstone and shale). They can also form from the precipitation of minerals from water or the accumulation of the remains of once-living organisms (chemical and organic sedimentary rocks, like limestone and rock salt).
19	Heat and pressure can cause changes in the mineral composition and texture of existing rocks. High temperatures can cause minerals to recrystallize or new minerals to form. High pressure can cause rocks to become more dense and can also align mineral grains.
20	This rock is likely a clastic sedimentary rock, specifically a conglomerate. It probably formed from the weathering and erosion of pre-existing rocks. These pebbles were then transported by water or other agents, deposited in layers, and eventually cemented together by minerals precipitating out of water flowing through the sediment.