Earth Science 11 — Unit 12 Worksheet

Part 1.

1. Describe what the differences are between the two types of continental margins.

2. Which type of continental margin is unstable? What geologic activities occur at this margin?

3. What type of geologic activity occurs in a passive margin?

4. Describe how mountain building needs passive margins.

Part 2.

5. Describe the two types of subduction collisions between continents and oceans, and how they relate to mountain building.

Part 3.

6. Draw a sketch of the collision between India and Eurasia. Be sure to show where the Himalayas are.

7. Describe the subduction process going on in #6.

Part 4.

8. Draw and label a sketch of each of the three types of faults. Be sure to read the description of each carefully before you label the direction of the forces and the direction of the movement.

Part 5.

9. Draw and label a diagram of a fold.

Part 6.

10. What is at the core of the Andes Mountains?

11. What nearby mountain range is a good example of a volcanic range?

Part 7.

12. What is meant by the term uplifting?

13. Describe each of the three methods for showing that uplifting has occurred.

Part 8.

14. If sedimentary rocks are found in layers that are not horizontal, what does this prove?

15. Describe what a fault-block mountain looks like.

Part 9.

16. Describe how geologists can tell if rocks layers are overturned.

17. What is cross-bedding?

UNIT 12 (CH. 16) → MOUNTAINS & PLATE TECTONICS

1. ACTIVE CONTINENTAL MARGINS

2. PASSIVE CONTINENTAL MARGINS

3. NORMAL FAULT

4. REVERSE FAULT

5. STRIKE-SLIP FAULT

6. ANTICLINE

7. SYNCLINE

8. FAULT-BLOCK MOUNTAINS

Earth Science 11 Unit 12 Test A

In a normal fault what are the stresses?

What are Terranes?

What are ripple marks, cross bedding, mud cracks, and shells all good indicators of?

When is subduction not happening?

What happens once the separating ocean between 2 continental plates disappears?

Are passive margins necessary for mountain building?

Is the active margin geologically stable?

In a transcurrent fault where do the stresses and movements occur?

Is a granite batholith at the core of the Andes Mountain?

Describe the different types of subduction collisions between a continental plate and an oceanic plate. (6 marks)

Draw a diagram which illustrates the forces acting and movement resulting in a reverse fault. (4 marks)