# Volcanoes and Plate tectonics
# Check for Understanding

1. Where do most volcanoes occur on Earth's surface?

2. What causes hot spot volcanoes to form?

3. When two oceanic plates collide, the result may be: (choose your answer and explain how you know)

    a. volcanoes on the edge of a continent

    b. a hot spot volcano

    c. volcanoes in an island arc

    d. a volcano along the mid ocean ridge

# Answer Key

1. Most volcanoes on Earth's surface occur where oceanic plate subducts under less dense plate, either continental plate or another ocean plate

2. Hot spot volcanoes form where magma melts through the crust above it and comes through the surface. This usually happens somewhere in the middle of a plate.

3. c

The answer is not (a) because two oceanic plates do not collide at the edge of a continent

The answer is not (b) because hot spot volcanoes happen in the middle of plates, not at the edges.

The answer is not (d) because the mid ocean ridge is where new plate is formed, not where plates collide

The answer is © because when oceanic plates collide, volcanoes can form. Because this is in the middle of the ocean those volcanoes will create islands