**Volcanic eruptions**

A **volcano** is a place where extremely hot material from inside the Earth erupts at the Earth’s surface. This material includes:

• gas such as steam and hydrogen sulfide

• ash (fine particles of rock)

• **lava** (molten rock)

• lumps of solid volcanic rock like scoria.

Volcanoes form where there are weak spots in the Earth’s crust and where extremely hot molten rock called **magma**

has accumulated below the weak spots. This magma is occasionally pushed upwards under great pressure into the

volcano.

**Where do volcanoes form?**

**Volcanoes at the edges**

As Figure 10.3.3 shows, most volcanoes form near the edges of tectonic plates. This is because the movement of the

plates creates weaknesses in the crust and also generates a lot of heat, which can melt rock. Diverging plate boundaries create weaknesses in the crust because the separating plates thin the crust. This lowers the

pressure on the underlying hot rocks of the asthenosphere and they melt. The magma created then finds its way up

Converging plates, especially where subduction occurs, create weaknesses in the crust and generate a lot of heat. If

the colliding boundaries occur under the ocean, chains of volcanic islands (island arcs) can be formed at the edges of

the tectonic plates