

SECTION 2

Enrichment

Igneous Intrusions

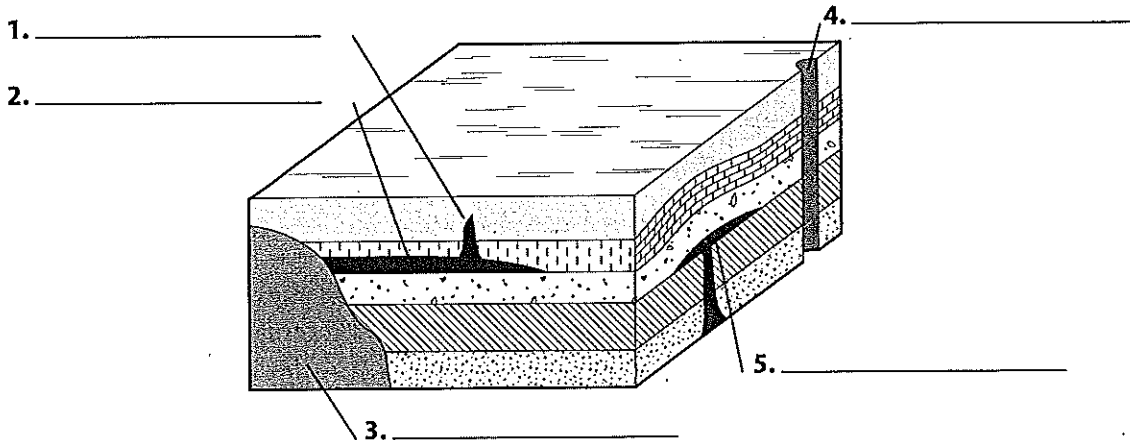
Do you remember your last birthday? What about the last time you went on a class field trip or had pizza for dinner? Which of these three events happened first? Which two followed and in what order? Placing these events in the order they happened is called relative order.

Geologists use the principles of relative order to help them understand sedimentary rock formations. One type of formation they look for is an igneous intrusion. To intrude is to enter by force. So, an igneous intrusion is when hot magma forces its way into cracks

beneath Earth's surface, forming a mass of igneous rock within the sedimentary layers. Using relative order, geologists know that a rock formation with an igneous intrusion means the intrusion occurred after the layering was formed.

Geologists easily recognize igneous intrusions because they have certain identifying features. These features include a vertical, cylindrical structure called a volcanic pipe, as well as a dike, which is the part of the igneous rock that cuts diagonally across the existing rock.

Directions: Examine the diagram below and, using resources in your library, label the following igneous intrusions: **volcanic pipe, dike, sill, laccolith, and batholith**. Then define the terms in questions 6 through 8 using complete sentences.



6. sill

7. laccolith

8. batholith
