**Passage I (Week 12)**

*Metamorphic rocks* form when temperature and/or pressure cause changes in preexisting rock. Figure 1 shows the temperature and pressure conditions in which certain *facies* (categories of metamorphic rocks) are formed.





A rock’s *metamorphic grade* (a measure of the intensity of metamorphism) is classified on a scale of low (very similar to the original rock) to high (very different from the original rock). Table 1 lists the grades of Facies A–G from Figure 1. Figure 2 shows characteristic minerals that maybe present in rocks of a given grade.

**1.** According to Figure 2, which of the following minerals would most typically be found only in rocks of a medium grade? (IOD 401)

2. According to Table 1, a Facies G rock will most likely be rated at which metamorphic grade? (IOD 201)

**3.** Which measurement was not represented in Figure 1? (IOD 202)

**4.** According to Figure 2, the presence of which of the following minerals in a metamorphic rock would be *least* helpful in determining that rock’s grade? (IOD 502)

**5.** If a scientist found a rock at a depth of 30km, and a temperature of 950oC the rock is most likely a member of which faces? (IOD 503*)*