Response Sheet—Investigation 3

Below are three students’ explanations of the reasons for the seasons. Read each entry, then write a short paragraph explaining to each student what they need to change about their thinking.

Student 1 wrote:

The reason for the seasons is that Earth revolves around the Sun in an elliptical orbit. When Earth is farthest from the Sun, it is winter. When Earth is closest to the Sun, it is summer.

Student 2 wrote:

Summer is when we are facing the Sun. Winter is when we are facing away from the Sun.

Student 3 wrote:

The tilt always leans toward the Sun. It takes 365 days for Earth to rotate one time. So when we are on the side toward the Sun, it is summer. When we are on the side away from the Sun, it is winter.

We are here on Dec. 21

We are here on June 21

Student 1 wrote:

Student 2 wrote:

Student 3 wrote: