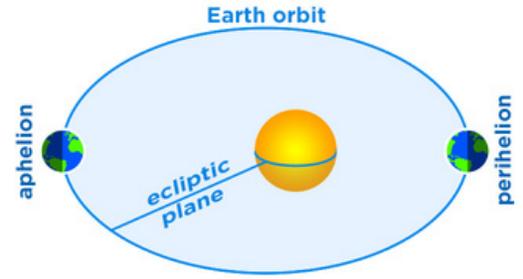


HANDOUT - CAN YOU TELL WHICH CIRCLE IS BIGGER?

Big Idea

The perihelion is the point at which earth is closest to the sun. This is due to the fact that the Earth's orbit is elliptical (ie. oval).



At the perihelion:

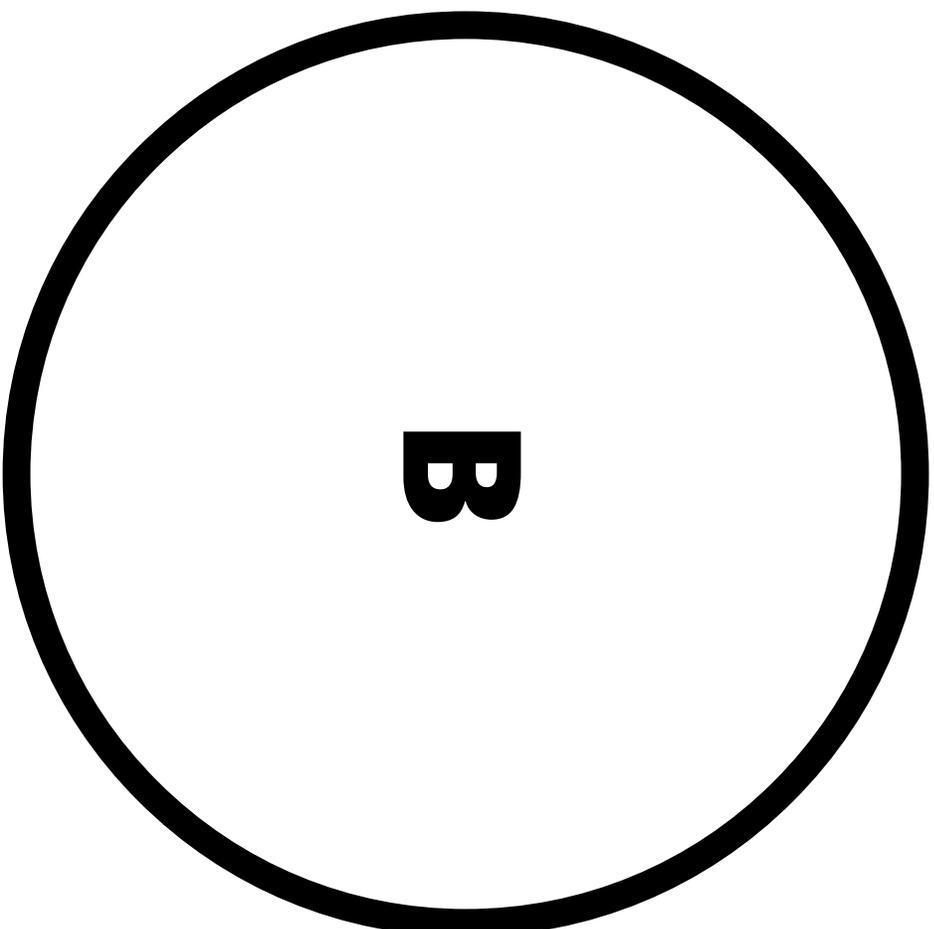
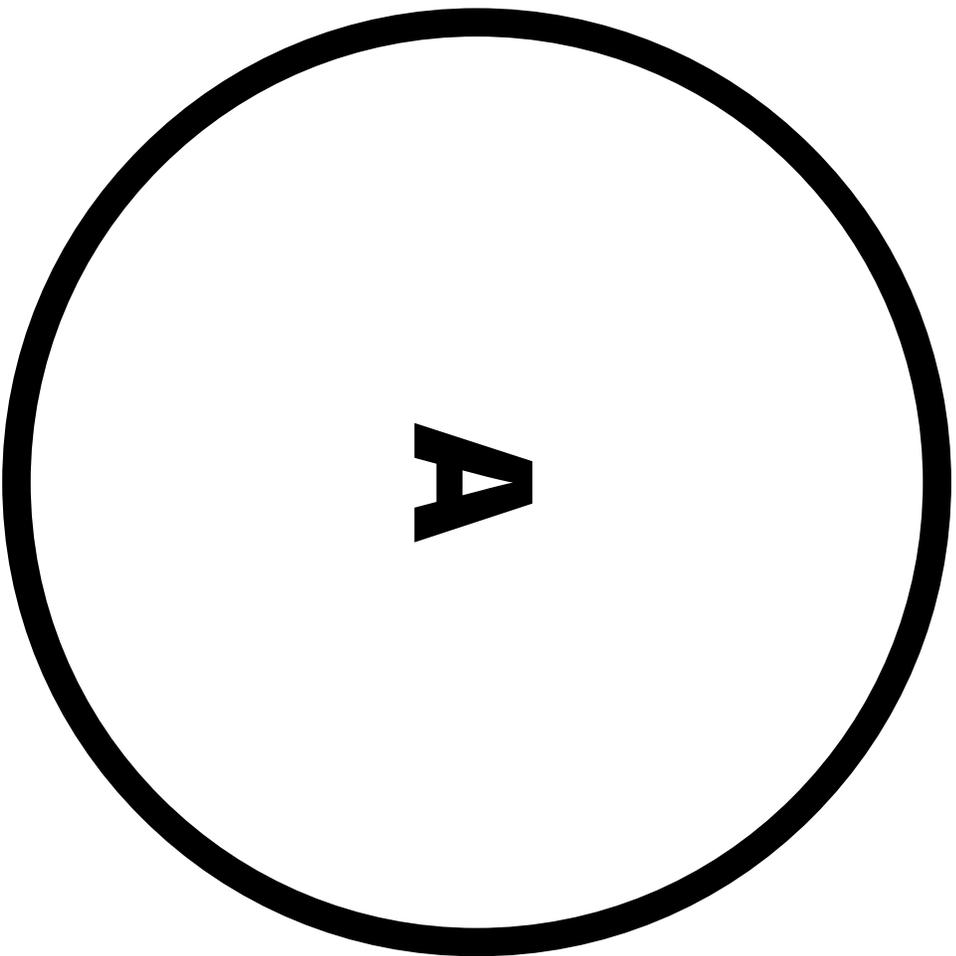
- The earth is 2% closer to the sun than average.
- The sun appears 3% bigger in the sky than average.
- The light we receive is 7% stronger.

But, what can we do to illustrate how slight these differences are?

Instructions

1. Provide students with a copy of the two circles (Circles A and B) on the following page. One of the circles is approximately 3% bigger than the other.
2. Have students tape the circles to the wall and stand 1 metre from the wall. If students are doing this on the computer, then have students make the image "Full Screen" and stand 1 metre from the screen.
3. Challenge students to determine which circle is larger. They can use any method they choose. However, they need to stay 1 metre away, they cannot touch the screen or document, and they must write down what they did in coming up with their answer.

NOTE: Circle A is approximately 3% bigger by area. Could your students tell?



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