



**Science Grade 5
Scoring Guide for
Released Item #10
Earth and Sun
Fall 2005**



Prompt



ANSWER THE FOLLOWING CONSTRUCTED-RESPONSE ITEM IN YOUR ANSWER FOLDER.

**Constructed-Response
(3 points)**

Earth and the sun are different from each other in many ways. They also have some similarities.

- Describe two ways that Earth is *different* from the sun.
- Describe one way that Earth is *similar* to the sun.

NOTHING WRITTEN IN THIS TEST BOOKLET WILL BE SCORED.

Science Rubric for the Comparison of Earth and Sun

Differences

- Earth is smaller than the sun (both are different sizes).
- The sun is hotter than Earth (different temperatures).
- Earth does not give off light (receives light) and the sun does.
- Earth has life and the sun does not (Earth has cities/states/countries).
- Earth is a planet and the sun is a star (i.e. gas); Earth has a different composition (dirt/rocks/water/land/continents).
- They are both different colors.
- Earth has a moon and the sun does not.
- Earth has a different amount of gravity than sun.
- Earth has seasons and the sun doesn't.
- Other acceptable differences

Similarities

- Earth and the sun are both part of the solar system/galaxy/milky way.
- Earth and the sun are both spheres (round/circle).
- Both rotate.
- Both have atmospheres.
- Both have cores.
- Both have gravity.
- Both have layers.
- Both have at least 1 planet surrounding them.
- Both change temperatures.
- Both travel in an orbit.
- Both have something orbiting them.
- Both help us to survive.
- Other acceptable similarities

Scoring Guide:

3 points The student describes two ways Earth is different from the sun and one way Earth is similar to the sun.

2 points The student describes two ways Earth is different from the sun but fails to describe a way Earth is similar to the sun.

OR

The student describes one way Earth is different from the sun and one way Earth is similar to the sun.

1 point The student describes one way Earth is different from the sun.

OR

The student describes one way Earth is similar to the sun.

0 points The student fails to show any understanding of differences or similarities between Earth and the sun.

Condition codes for unratable papers (zeroes):

A – Off Topic

B – Written in a Language other than English or Illegible

C – Blank or Refusal to Respond

Anchor Paper 1 – Score Point 3

Constructed Response

Two ways that earth is different from the sun are, the sun is what gives off light and earth receives the light. Another way they're different is that the sun is much, much bigger than the earth. One way that the earth & the sun are like is that they're both in one solar system.

Anchor Paper 1
Score Point 3

The student describes two ways Earth is different from the sun (*the sun is what gives off light and earth receives the light; sun is much, much bigger than the earth*) and describes one way Earth is similar to the sun (*They're both in one solar system*).

Anchor Paper 2 – Score Point 3

Constructed Response

The Earth and sun have differences and similarities. The Earth is different from the sun because people live on the earth and it is cooler in temperature and there is land and water on it. The sun and Earth are similar because they are both considered as planets and they each have something orbiting them. The other planets orbit the sun and the moon orbits the Earth.

**Anchor Paper 2
Score Point 3**

The student describes two ways Earth is different from the sun (*People live on the earth and it is cooler in temperature and there is land and water on it*). This implies the obverse statements, that people do not live on the sun and that the sun is warmer in temperature than the Earth and there is no land or water on the sun. The student describes one way Earth is similar to the sun (*They each have something orbiting them. The other planets orbit the sun and the moon orbits the Earth*). The other similarity given (*They are both considered as planets*) is incorrect, but does not detract from the understanding shown.

Anchor Paper 3 – Score Point 3

Constructed Response

The sun is very hot. No one lives on the sun. They are both planets. They both are round.

**Anchor Paper 3
Score Point 3**

The student describes two ways Earth is different from the sun: (*sun is very hot*) implies that the Earth is not hot and (*No one lives on the sun*) implies that the Earth is lived on. The student describes one way Earth is similar to the sun (*Both are round*).

Anchor Paper 4 – Score Point 2

Constructed Response

The earth is smaller than the sun. The sun stays in place, the earth moves. The earth and the sun are both in the same galaxy.

**Anchor Paper 4
Score Point 2**

The student describes one way the Earth is different from the sun (*Earth is smaller than the sun*) and attempts to describe an additional difference (*sun stays in place, the earth moves*) which is not correct because the sun also rotates and revolves. The student describes one way Earth is similar to the sun (*Earth and the sun are both in the same galaxy*).

Anchor Paper 5 – Score Point 2

- Constructed Response

One way the Earth is different from the Sun is that we have living things. Like animals, humans, trees, and plants. Another way is that the Earth is not a star. Like the Sun is. The way they are alike is that they both recive or give off light. This is how they are alike and different.

Anchor Paper 5
Score Point 2

The student describes two ways the Earth is different from the sun: the statement that "Earth is different...we have living things. Like animals, humans, trees, and plants" implies that the sun does not have living things on it and "Earth is not a star" implies that the difference is that the sun is a star. The response attempts to describe how Earth is similar to the sun (*Both recive or give off light*). This is not an acceptable similarity because the Earth receives light and the sun gives off light.

Anchor Paper 6 – Score Point 2

Grade 5 SCIENCE Part 1

3 points

The Eath is different from the sun
by the sun is ~~very~~ very, very hot,
and the Eath is not ~~very~~ very, very hot,
& they both look like ball.

Anchor Paper 6 Score Point 2

The student describes one way the Earth is different from the sun (*the sun is very, very, very hot....the Eath is not very, very, very hot*) and describes one way Earth is similar to the sun (*both look like ball*).

Anchor Paper 7 – Score Point 1

Constructed Response

The Earth and Sun are alike because they both have at least one planet surrounding them.

Anchor Paper 7
Score Point 1

The student describes one way the Earth is similar to the sun (*are alike because they both have at least one planet surrounding them*).

Anchor Paper 8 – Score Point 1**- Constructed Response**

Two ways they are different are because the sun is made out of gas. Another way is it is a star and the earth isn't. Two ways they are alike is they are both in our universe. You can see both in outer space.

**Anchor Paper 8
Score Point 1**

The student describes one way the Earth is different from the sun (*The sun is made out of gas*) and attempts to describe an additional way the Earth is different (*It is a star and the earth isn't*). This is a continuation of the same difference; the sun is a star (i.e. gas) and the Earth is a planet, with a different composition (dirt/rocks/water/land/continents). The response does not describe an acceptable way in which Earth is similar to the sun (*can see both in outer space*). The Earth and sun are both part of the solar system, galaxy or milky way.

Anchor Paper 9 – Score Point 0

Constructed Response

The Earth is different from the sun because The Earth spines on its axis & the sun does not & because the Earth is bigger than the sun. The Earth is similar to the sun because the sun & Earth light up.

Anchor Paper 9
Score Point 0

The student fails to show any understanding of the differences between Earth and the sun (*Earth spines on its axis + the sun does not, Earth is bigger than the sun*) and fails to show any understanding of the similarities between Earth and the sun (*The sun + Earth light up*).

Anchor Paper 10 – Score Point 0

Constructed Response

water

land

around

Anchor Paper 10 Score Point 0

The student fails to show any understanding of differences or similarities between Earth and the sun. The response lists three words (*water, land, around*) and gives no description of differences or similarities.