

# MIDDLE PRIMARY

## Beginner Science

### E-Booklet Part 3





# Thermal Energy Transfer Exercise 1

Middle Primary Beginner Science

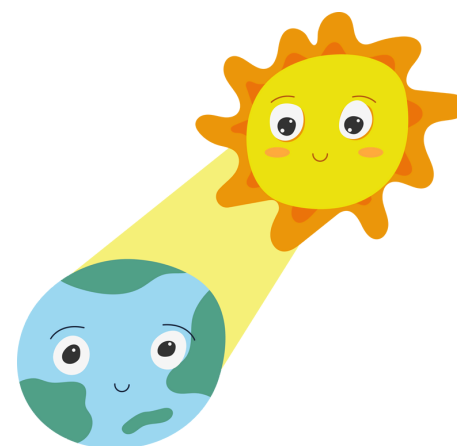
Circle the type of heat transfer that is responsible for each scenarios.

1. A metal spoon left in hot soup heats up as energy passes from the soup through the spoon to your hand.



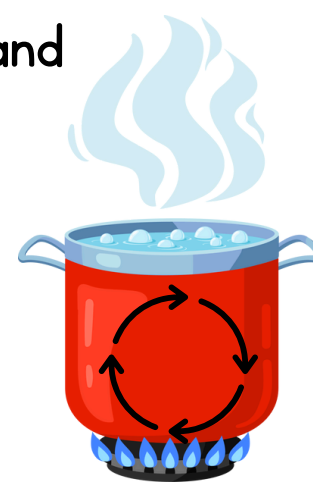
Conduction  
Convection  
Radiation

2. The sun's energy reaches Earth from millions of kilometers away.



Conduction  
Convection  
Radiation

3. Boiling water in a pot circulates as heated water rises and cooler water sinks.



Conduction  
Convection  
Radiation

4. Touching a hot iron transfers heat directly from the iron's surface to clothes, smoothing wrinkles.



Conduction  
Convection  
Radiation



# Thermal Energy Transfer Exercise 1 - Solutions

Middle Primary Beginner Science

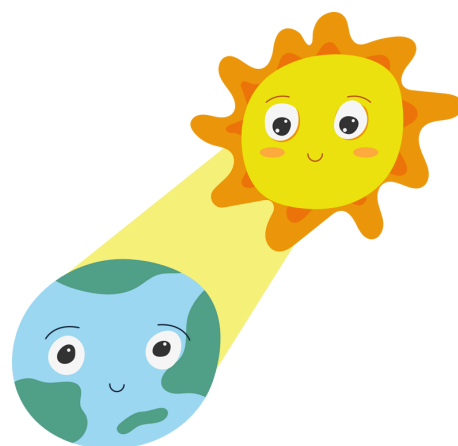
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- Conduction
- Convection
- Radiation



# Thermal Energy Transfer Exercise 2

Middle Primary Beginner Science

Circle the type of heat transfer that is responsible for each scenarios.

1. Bare feet burn on hot sand because the ground conducts solar heat to your skin.



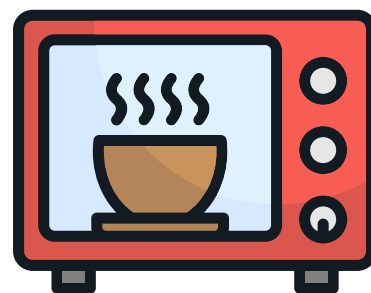
Conduction  
Convection  
Radiation

2. Sea breezes form as land heats faster than water, causing warm air to rise and cool sea air to flow in.



Conduction  
Convection  
Radiation

3. A microwave reheats coffee by emitting waves that vibrate water molecules.



Conduction  
Convection  
Radiation

4. The heat from a fire that helps to warm your hands.



Conduction  
Convection  
Radiation



# Thermal Energy Transfer Exercise 2 - Solutions

Middle Primary Beginner Science

Circle the type of heat transfer that is responsible for each scenarios.

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Conduction

Convection

Radiation

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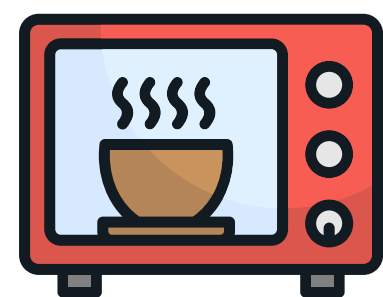


Conduction

Convection

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Conduction

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Conduction

Convection

Radiation

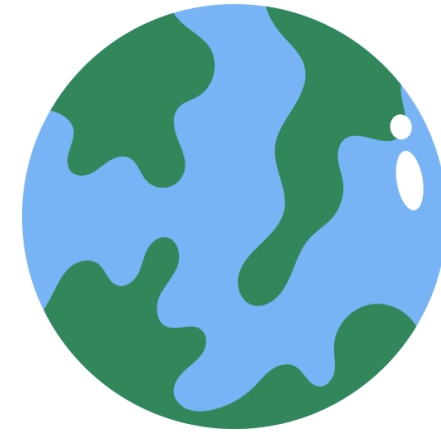


## Science Understanding - The Earth

Middle Primary Beginner Science

Read the passage. Answer the questions below. Circle whether it is True or False.

Earth is our home planet, the third from the Sun. It spins fast on an invisible line called its axis, making day and night. Earth also travels around the Sun in a big circle called an orbit, taking one year. Like an onion, Earth has layers: the crust (thin skin with land and water), hot mantle, liquid outer core, and solid inner core. Oceans cover most of Earth, with seven big land pieces called continents. This spinning and moving help make weather and seasons!



### Questions

1. What number planet from the Sun is Earth?

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2. What is the name of the invisible line Earth spins on?

---

3. What does Earth's spinning on its axis cause?

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4. What is the thin outside layer of Earth called?

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5. There are eight continents on Earth. (True / False)

6. Oceans cover most of the Earth's surface. (True / False)

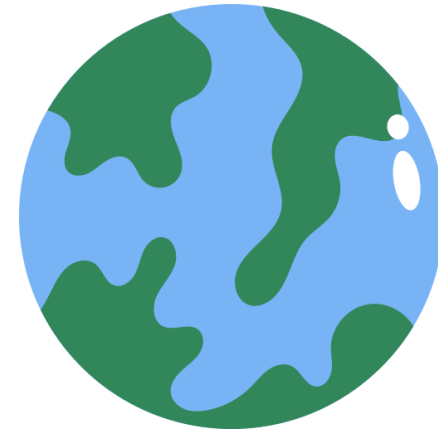


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### Questions

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Third from the Sun.

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Day and night.

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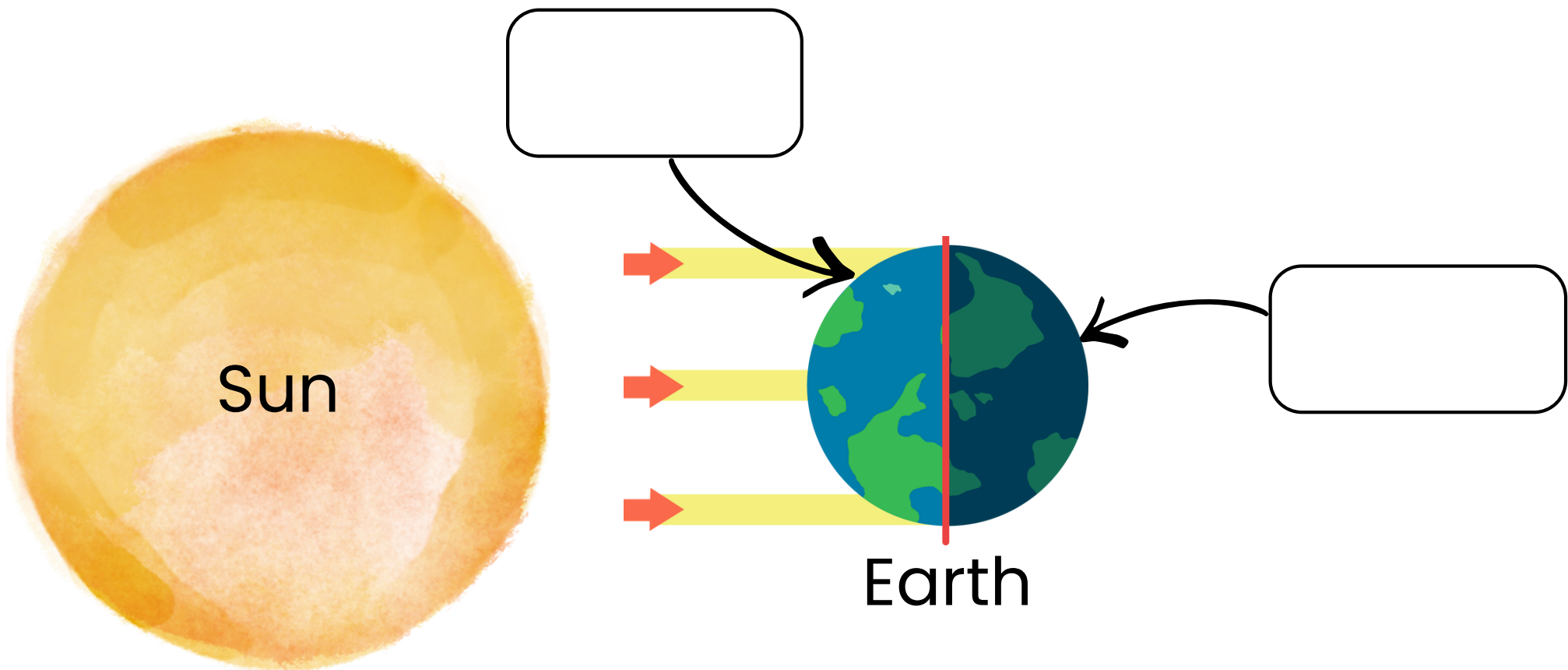
The crust.

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# Why Do We Have Day and Night?

Middle Primary Beginner Science



Label night or day in the boxes above. Fill in the blanks below.

Sun	daytime	nighttime
axis	light	Earth

The \_\_\_\_\_ is a big star.

We live on the planet \_\_\_\_\_.

The Sun gives out \_\_\_\_\_.

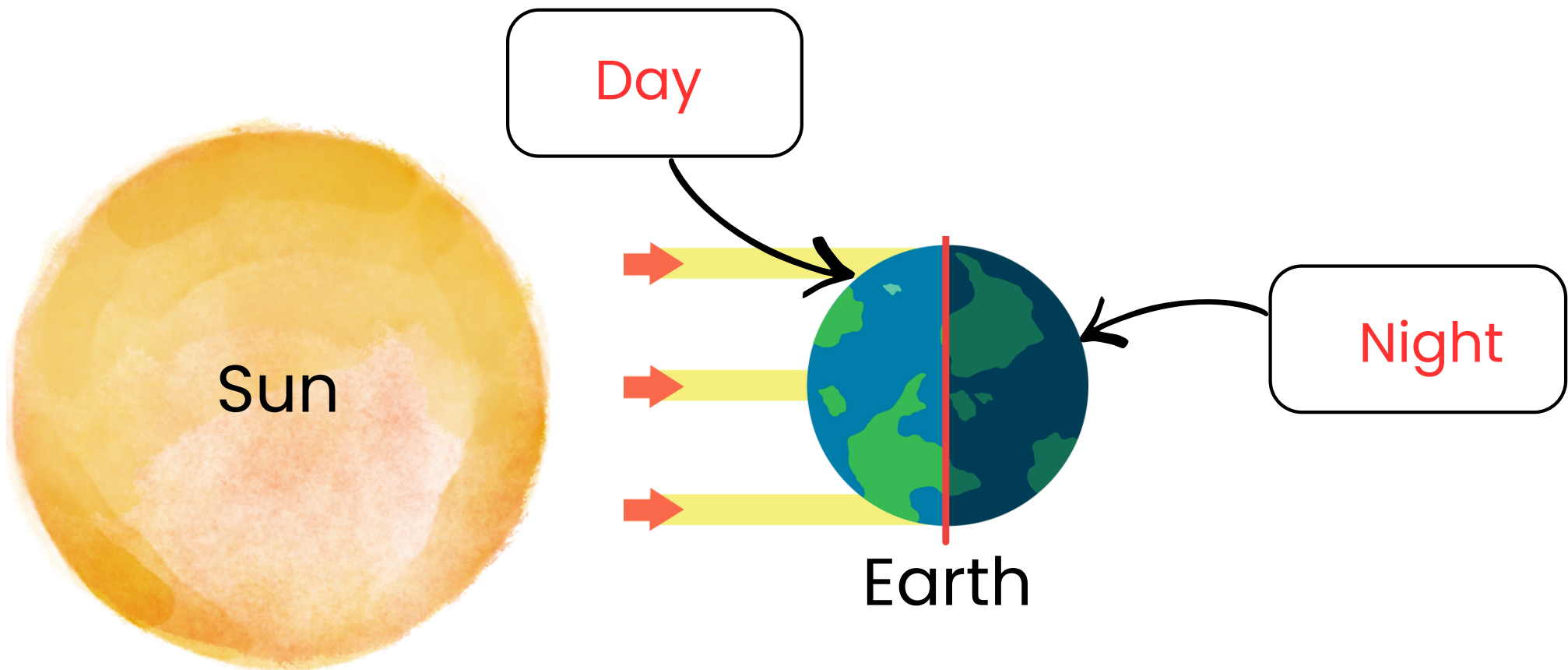
The Earth rotates on its \_\_\_\_\_.

When the sun shines one half of the Earth, it is \_\_\_\_\_.

The other half of the Earth, which is away from the Sun it is \_\_\_\_\_.

# Why Do We Have Day and Night? - Solutions

Middle Primary Beginner Science



Label night or day in the boxes above. Fill in the blanks below.

Sun	daytime	nighttime
axis	light	Earth

The Sun is a big star.

We live on the planet Earth.

The Sun gives out light.

The Earth rotates on its axis.

When the sun shines one half of the Earth, it is daytime.

The other half of the Earth, which is away from the Sun it is nighttime.