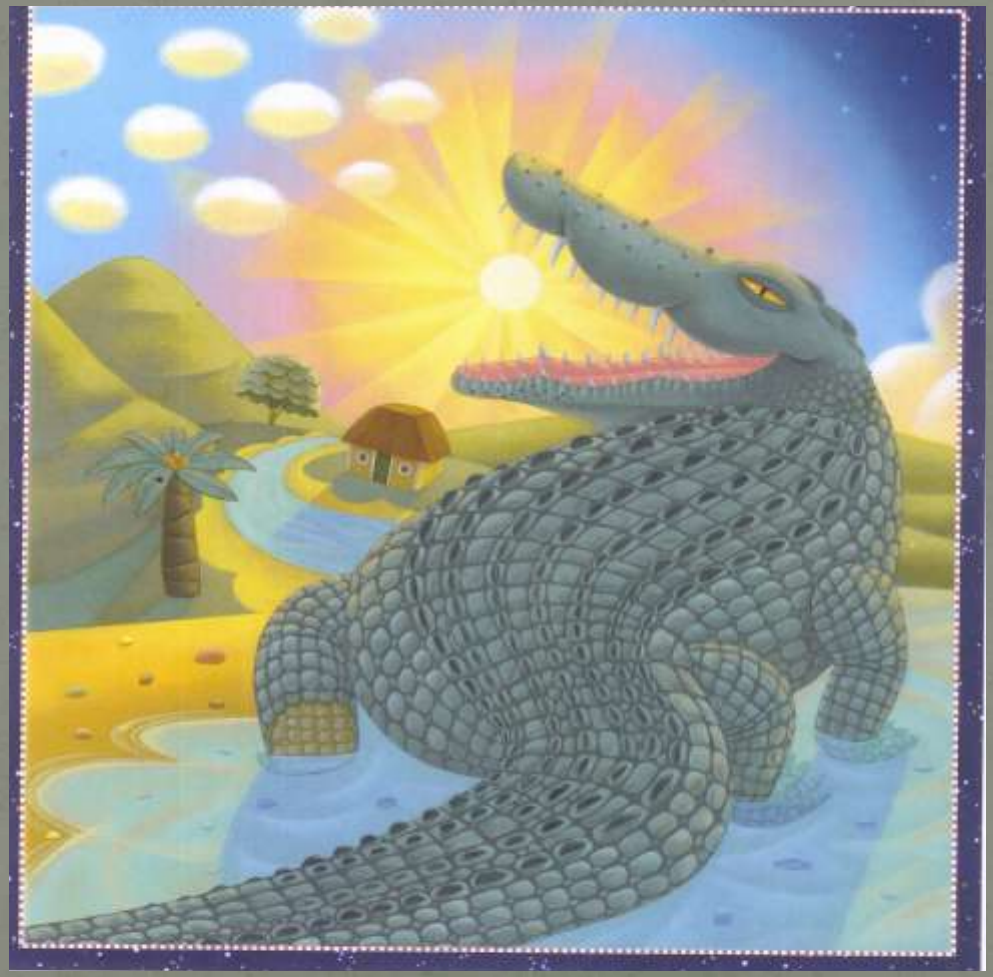
# The Crocodile Who Swallows The Sun



# THE CROCODILE WHO SWALLOWS THE SUN

BHEKI NTULI

A HUGE CROCODILE LIVED IN A RIVER NEAR THE SEA. Every evening he admired the beauty of the setting sun. But he could not understand how the sun disappeared in the west every evening, only to reappear in the east every morning.

So one day, just as the sun was about to set, Crocodile shouted: "Oh, beautiful Sun, how do you set in the west only to rise again in the east?"

"This is my daily journey, dear Crocodile," answered Sun. "I get into the water under the earth, and travel the whole night, until I rise up in the east the following morning."

"Do you ever rest or sleep, beautiful Sun?"

"I have no time for rest or sleep, dear Crocodile," Sun answered as he slowly sank into the waters of the west.

Crocodile thought that if he swallowed the sun, he might gain Sun's beauty and magical powers. So the next day he said to the sun: "Let me swallow you. You can rest inside me as I journey through the water at night. I will release you again in the east the following morning. Then I will quickly return to rest and wait for you to come to the west."

*Every year (365¼ days) the earth goes once around the sun. As the earth moves around the sun, it also spins (on its axis) like a giant ball. It takes 24 hours for the earth to spin around once. This spinning causes day and night. As the earth spins around, half of it will face the sun, while the other half will face away from the sun. When you are on the part of the earth facing towards the sun, you are in daytime. It is then dark – or night – on the opposite side of the earth.*

From that day on, Crocodile swallows the sun every evening and releases it every morning, hoping that one day he too will have the beauty and power of the sun.

# Questions

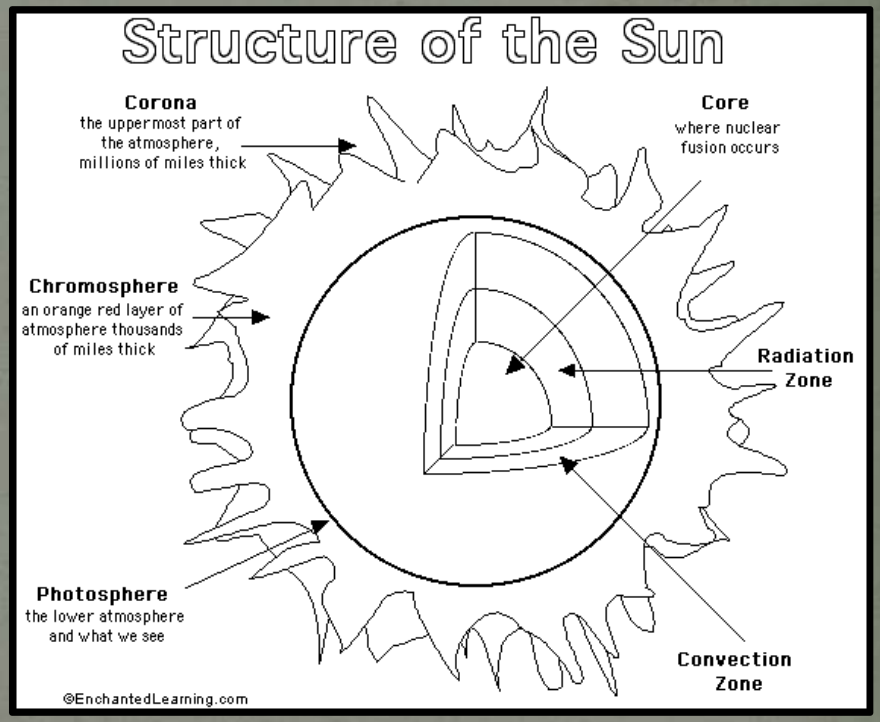
- Who lived in the river ?
- What did the Crocodile admire every evening?
- What could the Crocodile not understand?
- What did the Crocodile shout out to the sun?
- What was the Sun's answer?
- Does the Sun sleep?
- Why did Crocodile want to swallow the Sun?
- Did the Sun agree?
- What did the crocodile do the next day?
- Did Crocodile gain the power of the Sun after he swallowed him?
- Give one reason for your answer.

# Educator Notes

- The Sun is our nearest star. It's energy makes life on earth possible.
- Our Sun will shine as it is for another 3 to 5 billion years. It will then evolve into a red giant.
- The Sun's average distance from the Earth is 150 million kilometres.
- The Sun's diameter is about 109 times the diameter of the Earth.
- Like the Earth, our Sun has many different layers. Unlike the Earth, our Sun is made up of gas.
- The Sun is over 15 million degrees Celsius. That is HOT!
- The Earth orbits around the Sun.
- The Sun rotates on it's own axis once every 26 days
- The surface of the Sun often has continuously changing dark regions-sunspots.
- The sunspots can persist for an hour to several months. The number of sunspots increase and decrease in a 11 year cycle - the solar cycle.

# Educator Notes

- The Sun is made up of 6 different layers.
- The core is the inner most layer of the sun and the source of the Sun's energy.
- The radiation zone is responsible for transferring energy from the core to the outer regions.
- The convection zone is made up of plasma like the rest of the Sun. The plasma is a gas that conducts electric current like a wire.
- The corona is a thin outer layer of our Sun that is seen during the solar eclipse
- The **chromosphere** ( sphere of colour) is a 2000 kilometre thick layer of gas.
- The **photosphere** is the lower atmosphere what we can see.



# Learner Activities

- Learner Activities

***Sun Maze***

Learners complete the sun maze. Template provided below.

***Paper Plate Sun***

Learners paint the back of the paper plate yellow. Learners trace their handprints on paper or cardboard to place around the paper plate has the rays. Cut out the handprints and paint them yellow. Staple or glue the handprint on to the sun. Add details to the face of the sun using recyclable material.

***Sun Art***

Learners can collect few objects from their local environment and place them on a black paper. Place these objects in direct sunlight. This can be done indoors on the window still or out doors. Leave for a few hours and remove the object from the paper. Discuss why the shapes of the objects have remained on the paper, even thought the objects have been removed.

***Rotation of the Earth around the Sun (Day and Night)***

Place a lamp in the centre of the classroom. Learners stand in a large circle around the lamp which represents the Sun. Learners need to stand slightly apart to allow them to rotate easily. Explain that each of them will represent the rotating Earth. Begin the rotation with learner facing away from the Sun (night). Ask them to slowly rotate counter clockwise and keep looking straight ahead. As they turn, each student will be able to experience night, sunset, day, noon, sunset, and, completing the cycle, return to night.

***Sunlight and Shadows***

Use a light source (torch/lamp). Source objects from the environment. Place the object/s on white A4 paper or newspaper. Tilt the torch /lamp at different angles and draw the shadows of the objects accordingly. Observe what happens to the size and shape of the object. when the torch/lamp is close or away from the object. Have a whole class discussion on the observations.

# Learner Activities

- Learner Activity

***Sun Tag – Indentifying Shadows***

Play a game of shadow tag when teaching about the sun. On a sunny day, take learners outside. Select one child to be ***it*** .The child who is ***it*** tries to step on the shadows of the learners. When ***it*** steps on a learners shadow, the learner is out of the game. The game continues until ***it*** who is has stepped on all the shadows of his learners.

***Core of the Sun***

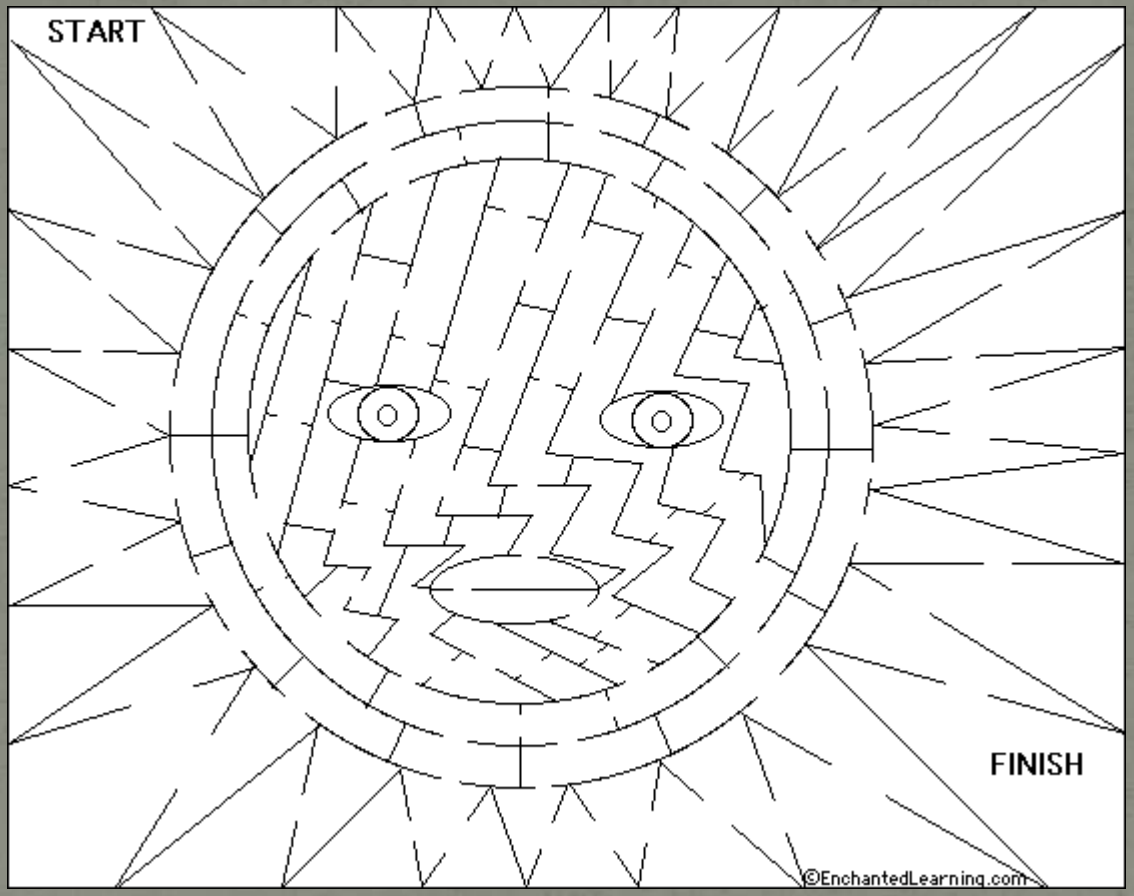
Use a paper plate for this activity. Draw a dot in the centre of the plate. Draw the 1st circle 5cm away from the dot . Draw the 2nd circle 5cm away from the 1st circle. The 3rd circle is about 3cm away from the 2nd circle. The 4th circle should about 1cm from the 3rd circle. The final circle should be 1/2cm from the 4th circle. The remaining area which is towards the edge of the plate and must be coloured in. Use the template to label the diagram.

***Sun Portraits***

Learners work in pairs and draw shadows on newspaper . One learner must stand next to the newspaper in order for his or her shadow to fall on it. The other learner traces the outline of the shadow with chalk or a marker. Paint or colour the shadow .You can also create an image of the person using recyclable materials.

***Thermometer***

Fill a medium plastic bottle with 3/4 water. Add food colouring to the water. Put a clear straw 1/3 into the water and seal the top with modelling clay. Mark the level of water on the straw. Place the bottle in different places at different times of the day and observe the change in temperature. Learners mark the change in temperature on the straw with different colour markers.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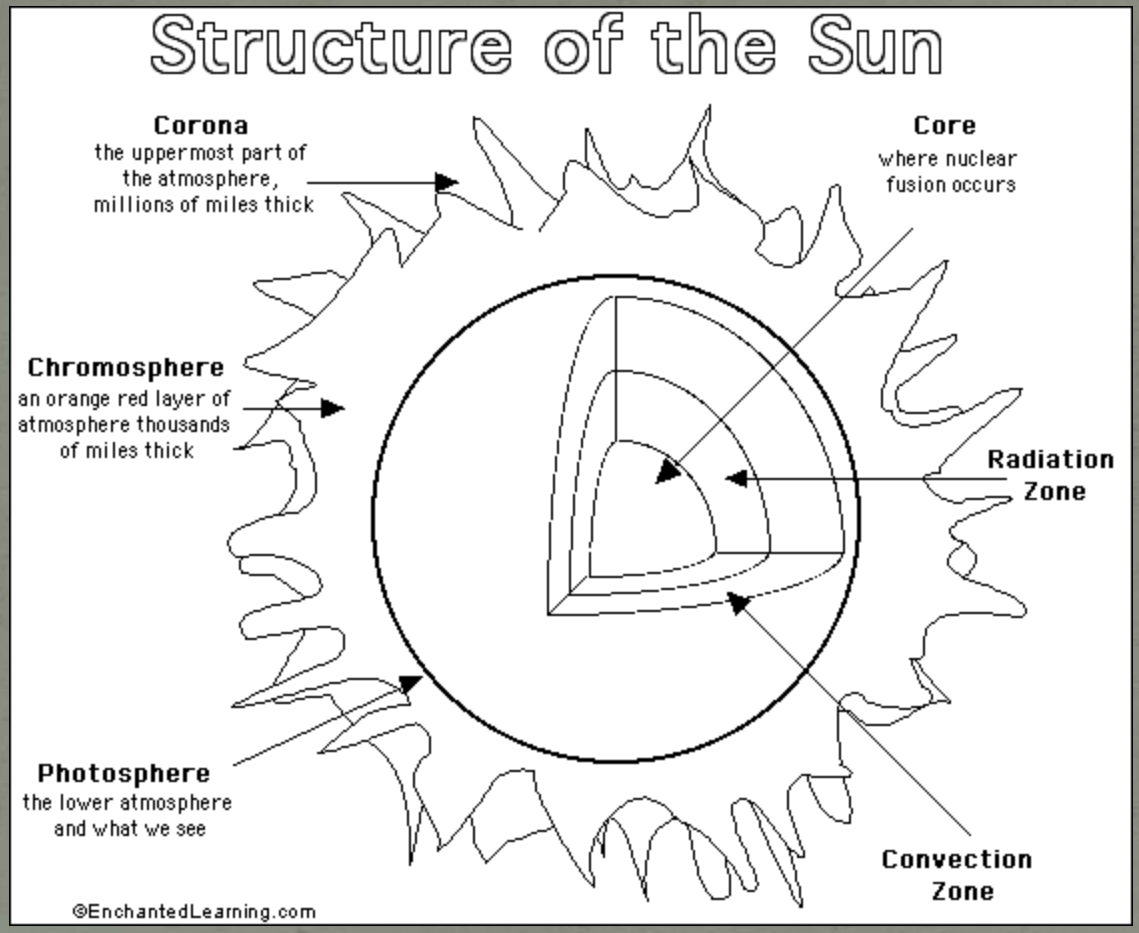
Structure of the Sun
Corona
the uppermost part of the atmosphere, millions of miles thick
Core
where nuclear fusion occurs
Chromosphere
an orange red layer of atmosphere thousands of miles thick
Radiation Zone
Photosphere
the lower atmosphere and what we see
Convection Zone
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