

Pre-K to Grade 1

Ready for U.S.*

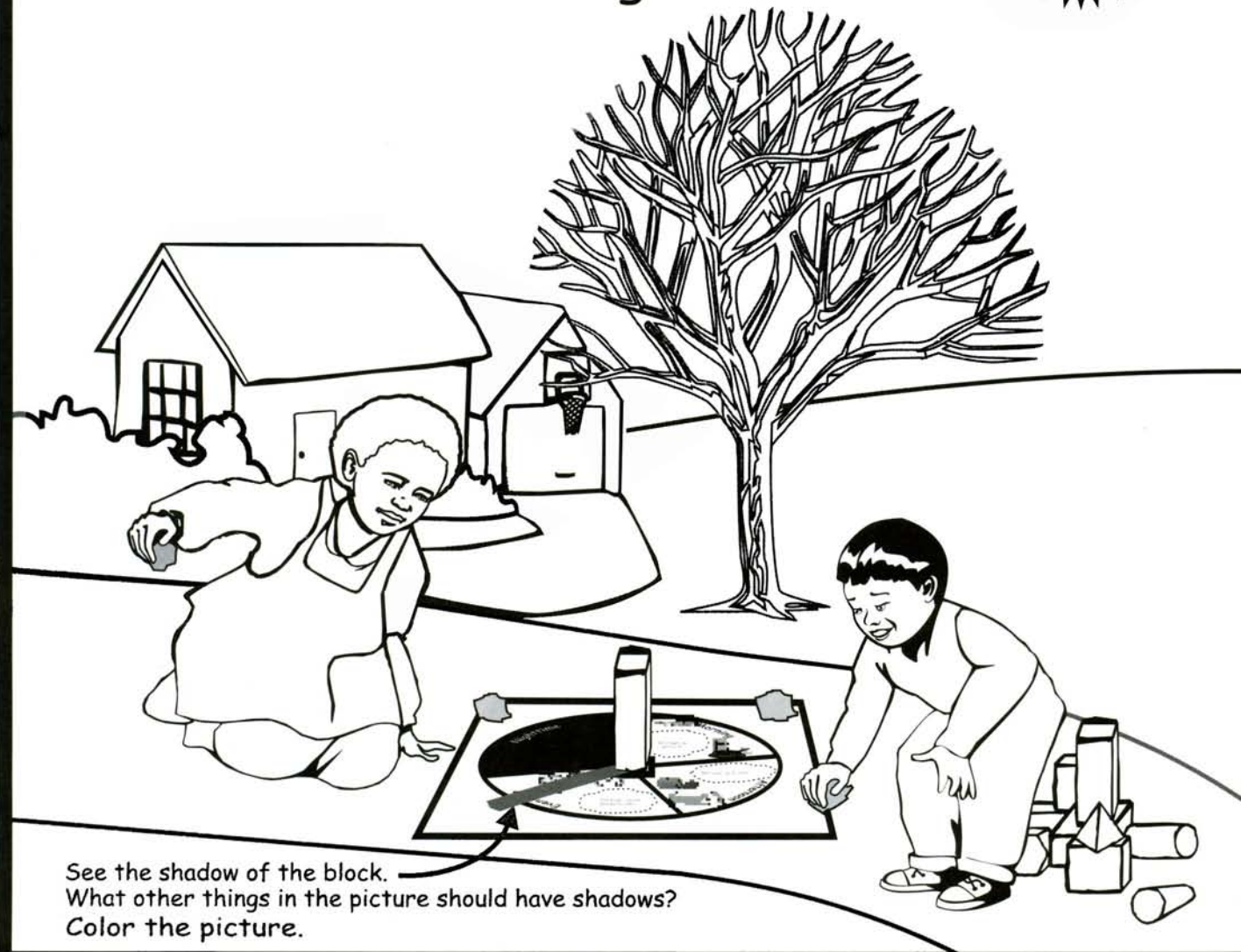
*Understanding Science

VOLUME 5 • ISSUE 2

2000 - 2001

Fernbank Science Center • DeKalb County School System

You can make a fun sun clock,
with the shadow of a block.
Stand a block up on the ground.
Watch the shadow go around.

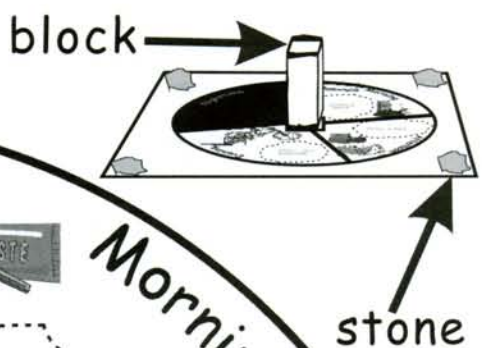


See the shadow of the block.
What other things in the picture should have shadows?
Color the picture.

MAKE A SUN CLOCK!

1. Take this page outside on a sunny morning.
2. Put the page on a flat place.
3. Stand up a tall block in the middle of the clock.
4. Turn clock so the shadow of the block is on Morning.
5. Add stones to the corners so page does not blow away.
6. Look at the shadow in the morning, afternoon and evening.

Your clock will not work here. Why not?



The main clock face is a large circle divided into four quadrants by a vertical line and a horizontal line. The quadrants are labeled as follows:

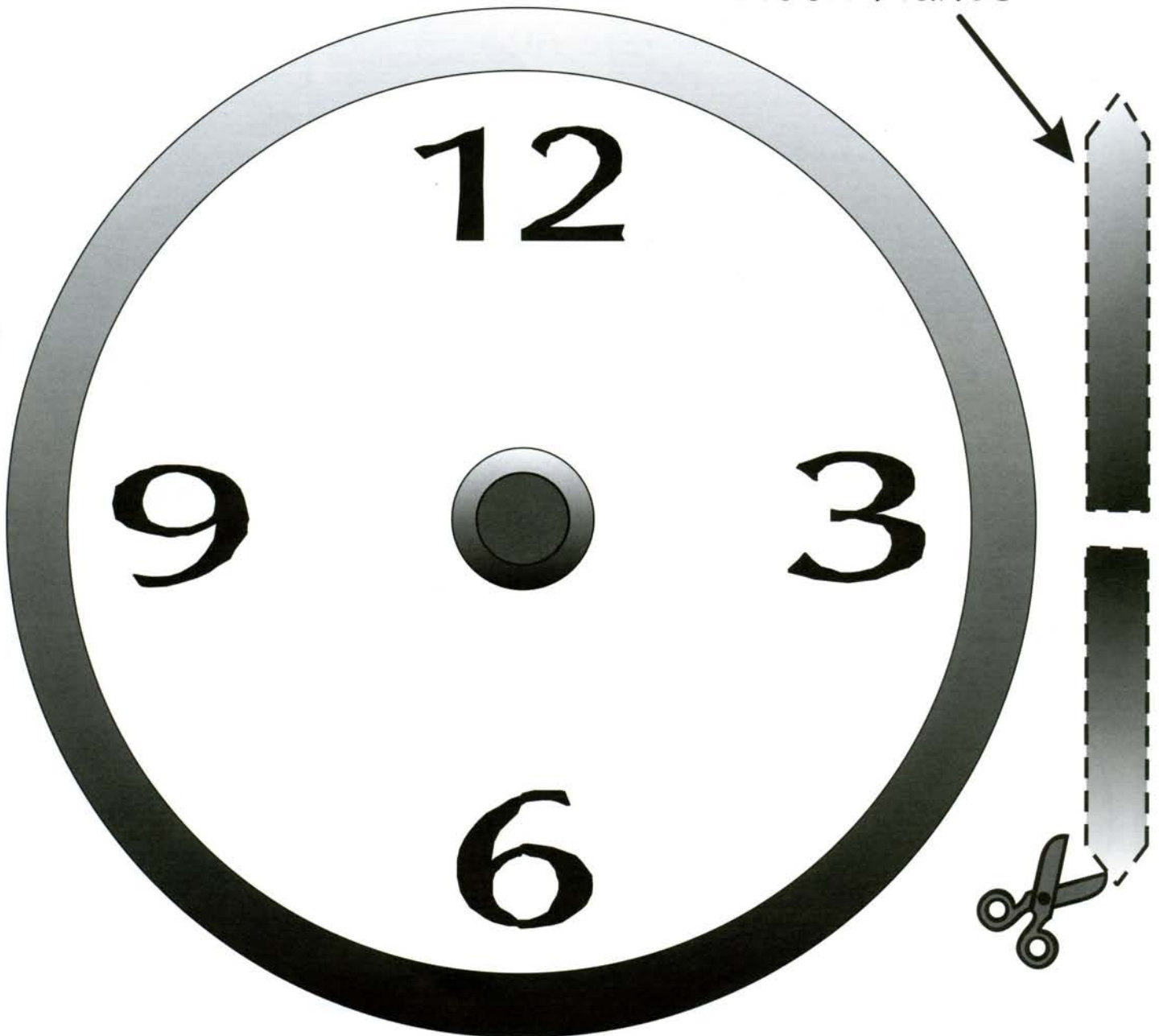
- Nighttime** (top-left, shaded black): An arrow points from the text 'Your clock will not work here. Why not?' to this quadrant.
- Morning** (top-right): Contains a tube of toothpaste, a dashed outline with the text 'Draw a shirt.', a carton of milk, a glass of milk, and a bowl of cereal.
- Afternoon** (bottom-right): Contains a lunch bag with an apple, an open book, and a dashed outline with the text 'Draw a ball.'.
- Evening** (bottom-left): Contains a bicycle, a pencil case with pencils, and a dashed outline with the text 'Draw your pajamas.'.

A central box with the text 'put block here' is positioned at the center of the clock face, with an arrow pointing to the center of the circle.

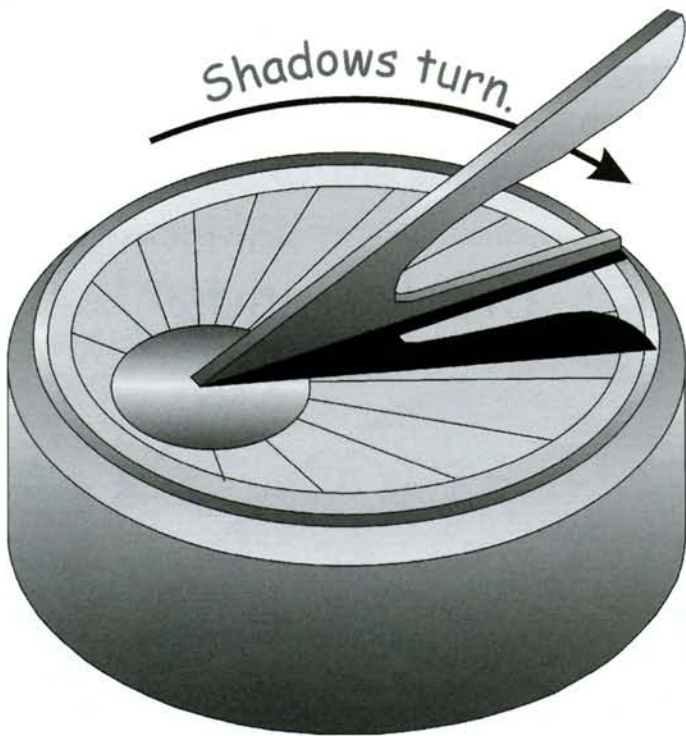
MAKE A CLOCK WITH HANDS!

1. Add the missing numbers to the clock.
2. Cut out the hands.
3. Put the hands on the center of the clock.
4. Have fun turning the hands to different times.

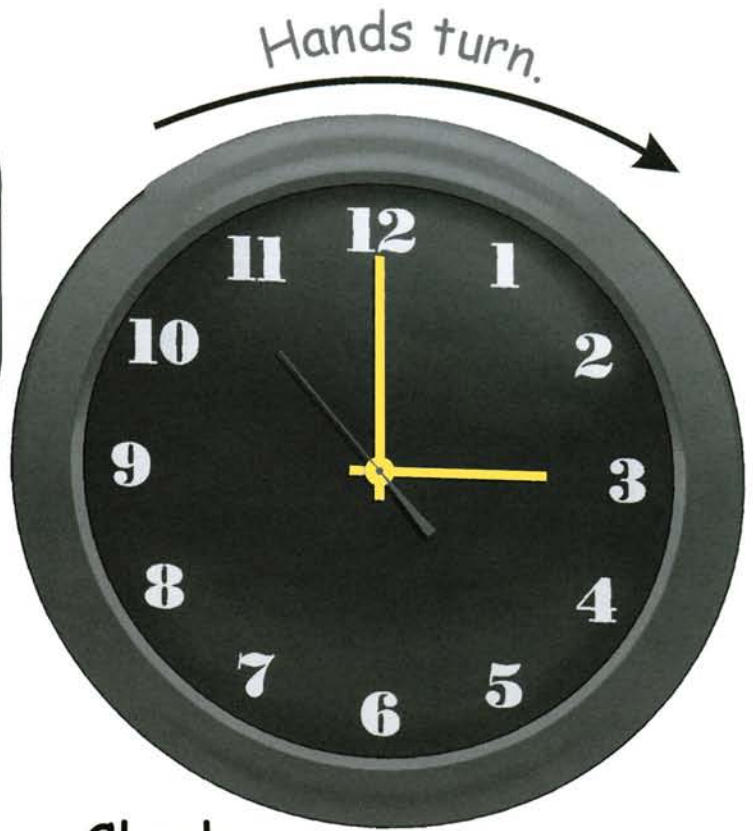
Clock Hands



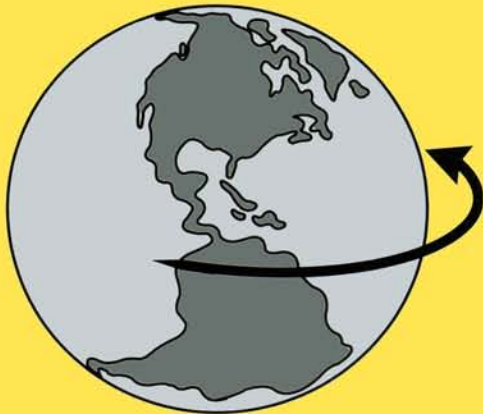
When people invented clocks, they made them with hands that move the same direction shadows move.



Sundial



Clock



The earth is always turning. This changes where the sun is in the sky. This makes the shadows move.