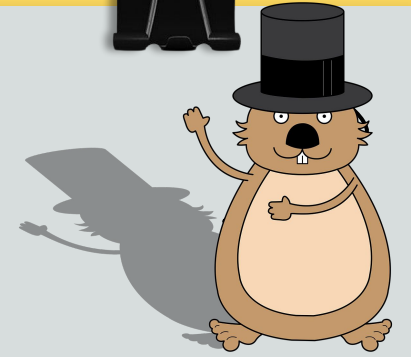


Make your own copy of this activity

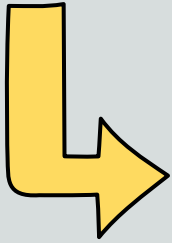


# EXPLORING LIGHT & SHADOWS



**OTIS**  
for educators!™





# EXPLORING LIGHT & SHADOWS



## Transparent

Materials that are see through and do not block any light. They do not make a shadow.

## Translucent

Materials that let some light through. They make a light shadow.

## Opaque

Materials that don't let light through. They reflect or absorb light and create a shadow.

## Silhouette

The outline of a shadow.

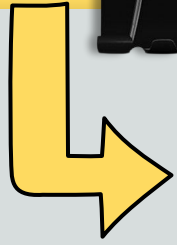
## Shadow

A dark shade that is cast on the ground when something blocks light.

## Light Source



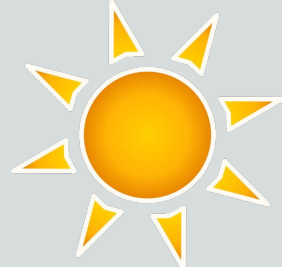


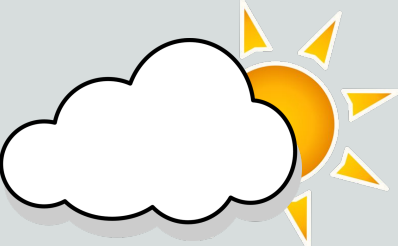


Objects that give off light (i.e. the sun).





# UNDERSTANDING SHADOWS

Look at the sun/clouds and then drag and drop the shadow for each groundhog based on the direction and placement of the sun/clouds.

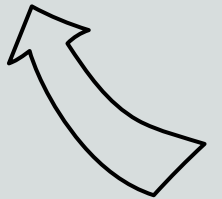
 	 
 	 

# Create Your Own Groundhog and Shadow



## Steps:

1. Color the groundhog and dirt
2. Cut out the groundhog and dirt and tape to a piece of cardboard
3. Stand up your groundhog and shine a light towards it. You can do this by taking it outside in natural light, or using a flashlight or other light source inside.
4. Determine whether or not you see a shadow. On a separate piece of paper sketch the shadow that you see, using a black crayon.



# Create Your Own Groundhog and Shadow

