

SCIENCE MISSION: VISIBLE INVISIBLE



MATERIALS

- White drawing paper
- Black construction paper
- Crayons or markers
- Glue
- Tape
- Wooden craft sticks
- Color copy of HANDOUT
- Color copy of Images
- Colored polypropylene notebook plastic dividers (or cellophane) in blue, red, green, and yellow

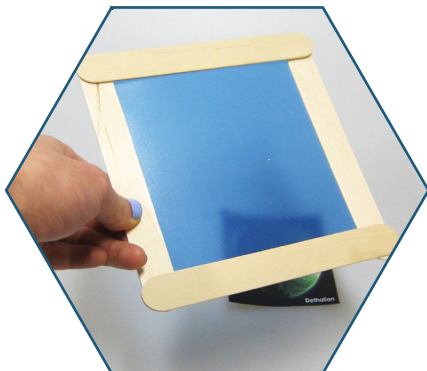
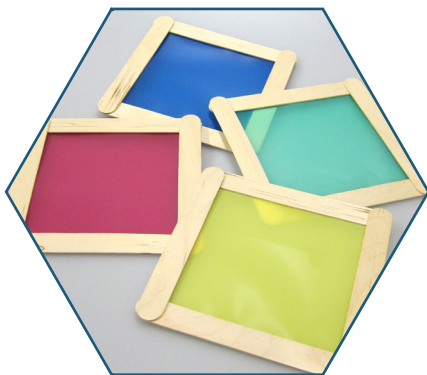


Preparation

1. Make 4 square frames from sets of 4 wooden craft sticks.
2. Tape different colors of plastic notebook dividers or cellophane to the back of the frames.
3. Cut out each picture on Images page and glue them on black construction paper.

Make the Visible Invisible

1. Move each overlay over each picture.
2. Mark on HANDOUT which color overlay changes the way your child sees the pictures of the planets.

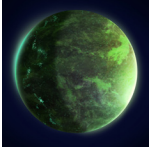

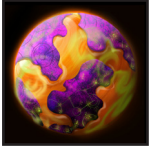


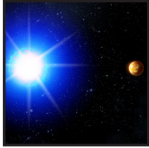


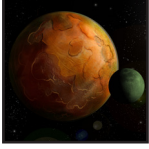









SCIENCE MISSION: VISIBLE INVISIBLE



ANSWER KEY:

		color of overlay			
		red	green	blue	yellow
PLANET DETHALIAN					
PLANET BLOPPSBERG					
PLANET ANTHEIA					
PLANET ALARBUS					
PLANET CALPURNIA					

CHALLENGE

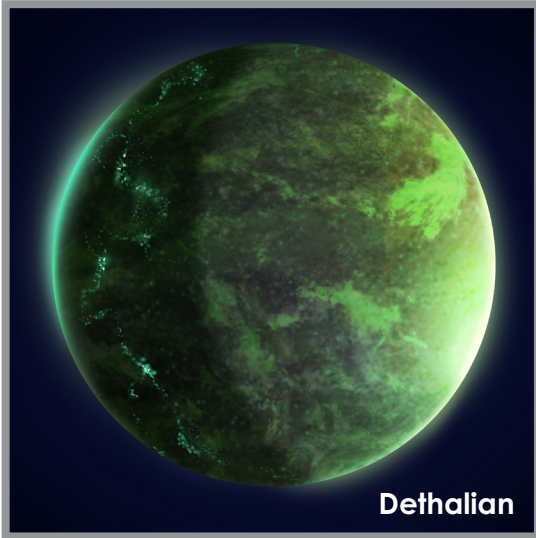
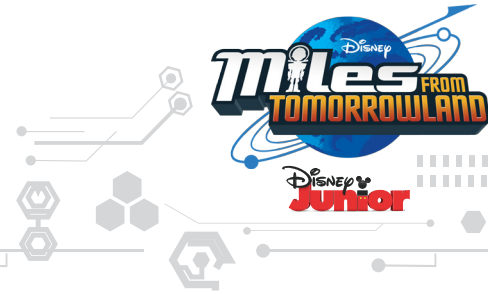
1. Use red, blue, yellow and green crayons or markers to draw pictures on white drawing paper or black construction paper. Remind your child to color within any lines so the pictures will be visible through the different overlays, or noticeably invisible on specific overlays.
2. Have your child note which overlays change how they see or do not see details of the drawings.
3. Discuss how the color of the overlay acts as a filter that allows only certain waves of light (and color) to reflect off the pictures. Discuss how the overlay changes how we see the colors in the pictures by asking questions:

What happens when you put blue on top of this picture? (Blue turns red and orange black.)

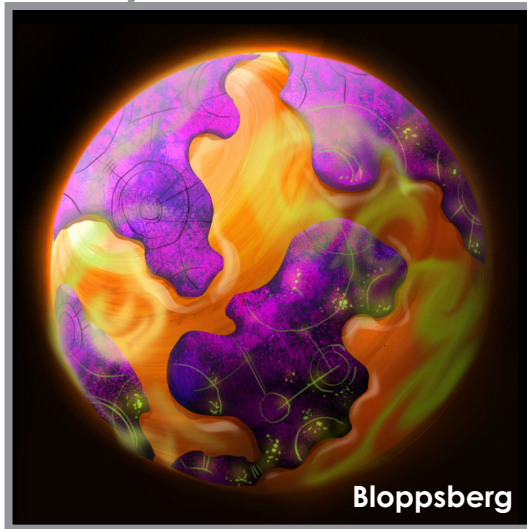
What happens when you put red on top of this picture? (Red turns blue and green black.)



MISSION IMAGES: VISIBLE INVISIBLE



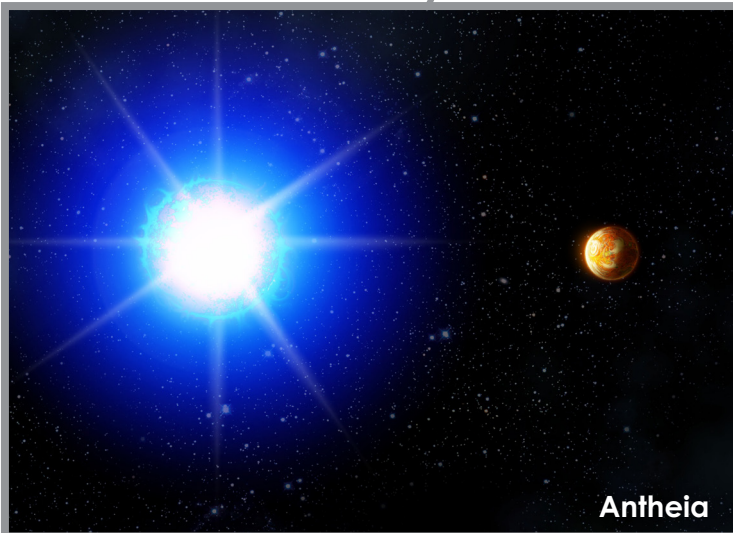
Dethalian



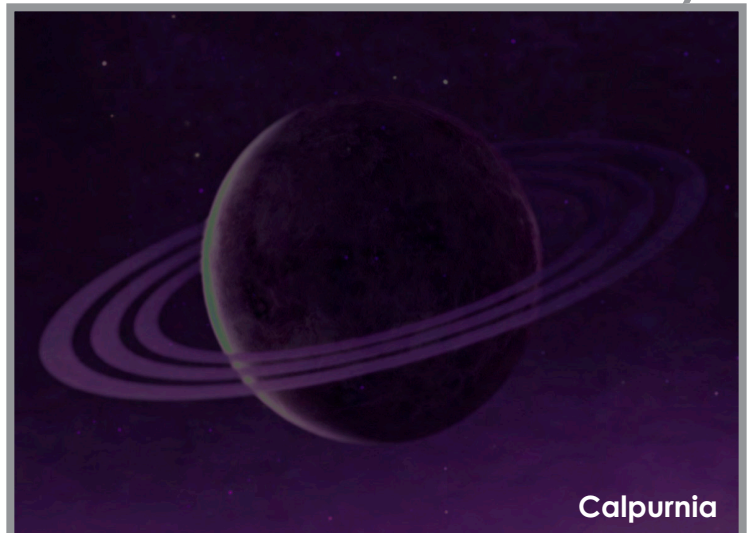
Bloppsberg



Alarbus



Antheia



Calpurnia



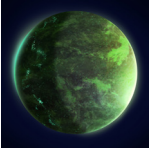
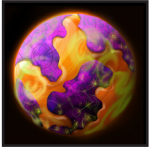

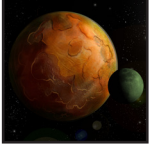
Note: Cutting is intended for grown-ups only.



MISSION HANDOUT: VISIBLE INVISIBLE



Make a checkmark when the overlay makes the picture look different.

		color of overlay			
		red	green	blue	yellow
PLANET DETHALIAN					
PLANET BLOPPSBERG					
PLANET ANTHEIA					
PLANET ALARBUS					
PLANET CALPURNIA	