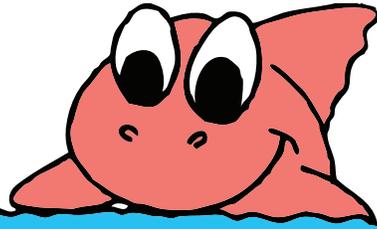


UNDERWATER LIFE

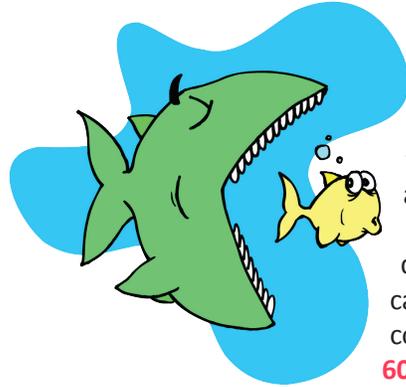


Fish come in all sizes, shapes

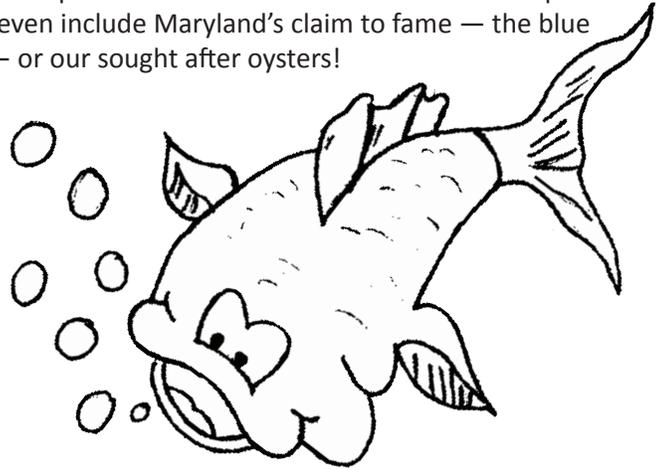
and colors, but this variety is not random. Fish live virtually anywhere there is water, whether it is a clear, fast moving stream, a quiet, weedy pond, or the open waters of the Chesapeake Bay. Some fish are predators, some are prey, and many are

both. The shape of the body, the location and shape of the fins, the location of the mouth, the color – all help determine where the fish lives, what it eats and how it protects itself.

Did you know that depending on where you cast a line in Maryland, you could catch one of more than **60 SPECIES OF FISH?** Our state



has striped bass, white perch and bluefish in the Chesapeake Bay, wild trout in the mountain streams of western Maryland, tidal largemouth bass in the Potomac River and Susquehanna Flats, summer flounder and black seabass in the coastal bays, white marlin and tuna in the Atlantic Ocean and a variety of panfish in ponds across the State. And all these species don't even include Maryland's claim to fame — the blue crab — or our sought after oysters!



SPECIES SODOKU

Fill in the empty boxes so that every row, column and 4-block square contains just one of each type of fish. (No duplicates!) Click on a fish to learn more about it.

 BROOK TROUT	1	2	 WHITE MARLIN
3	 STRIPED BASS	 SUMMER FLOUNDER	4
5	 BROOK TROUT	 WHITE MARLIN	6
 STRIPED BASS	7	8	 SUMMER FLOUNDER

Answer Key: 1. Summer Flounder; 2. Striped Bass; 3. White Marlin; 4. Brook Trout; 5. Summer Flounder; 6. Striped Bass; 7. White Marlin; 8. Brook Trout

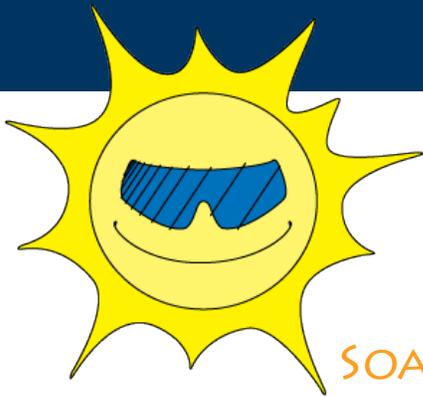
IT'S GREAT OUTSIDE!

The best way to learn about aquaculture is hands-on: go fishing! Anglers 15 years and younger do not need a license to fish, year-round. Parents can join for no cost on DNR's free fishing day this month, July 4.

DNR invites young anglers to keep up-to-date on youth fishing events by joining the free **MARYLAND YOUTH FISHING CLUB**, and encourages anglers of all ages to share their photos and experiences through the **MARYLAND ANGLER'S LOG**.



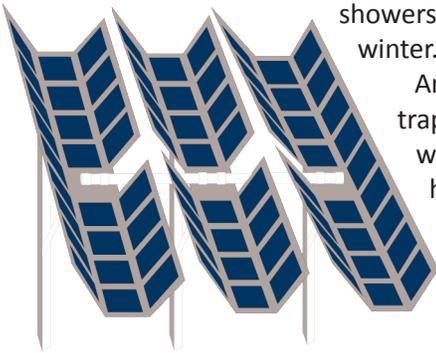
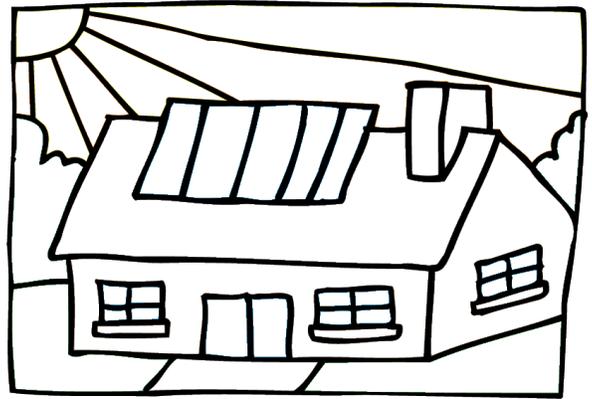
AUGUST



SOAK UP THE SUN

Solar energy is a *renewable resource*, which means it occurs naturally and can't run out from using too much of it. Powering our homes, schools and businesses with energy from the sun instead of *fossil fuels* like coal and natural gas is cleaner and safer for the environment.

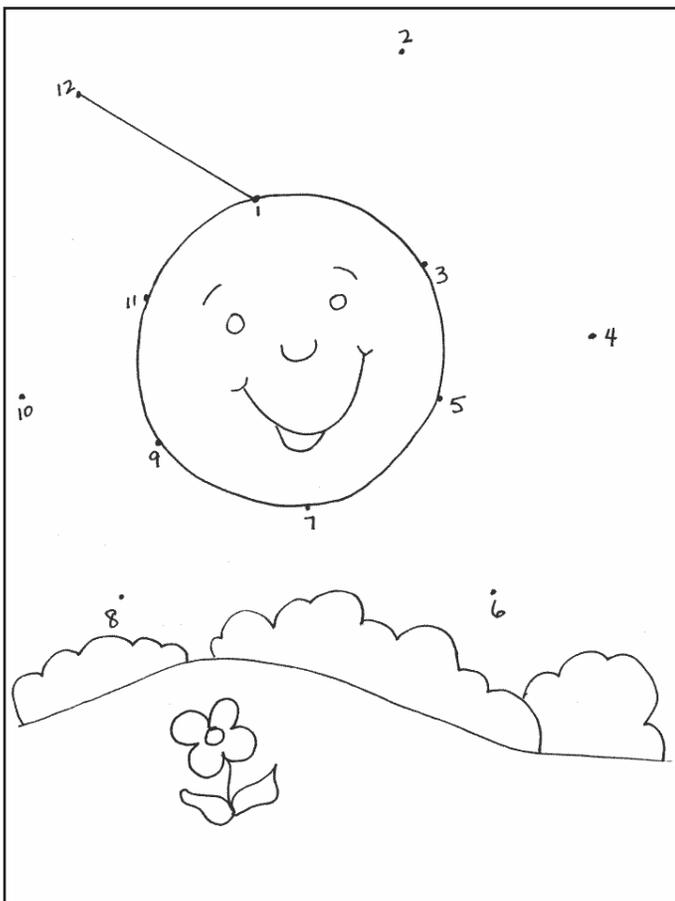
When light from the sun shines on an object, it either reflects or absorbs energy to produce heat. Solar heat can warm water for showers and keep our houses toasty in winter. It can also generate electricity.



And the best part: solar energy doesn't produce ANY pollution or *carbon dioxide*, which traps heat in the atmosphere. **TOO MUCH CARBON DIOXIDE** causes unusual temperatures, warming oceans, melting ice sheets and more extreme weather events, all making it harder for fish, wildlife, plants, and even us humans to live.

So, how does solar energy work? Which colors reflect light and which produce heat? Find out by completing the activity below!

CONNECT THE DOTS!



SOLAR ENERGY ICE CUBES

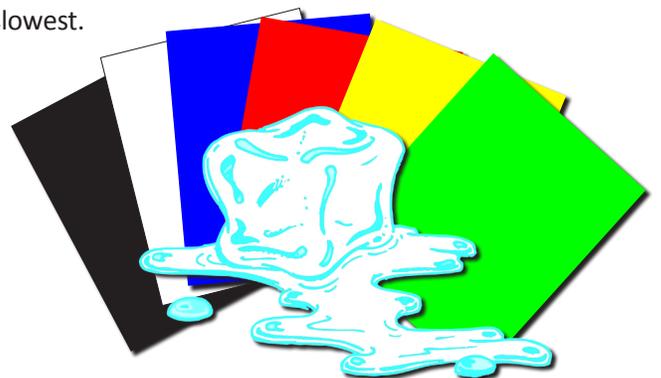
If you've ever seen solar panels, you've probably noticed they're usually dark blue. That's because darker colors absorb more light. Try this fun experiment with construction paper to see how different colors affect the melting rate of ice cubes.

What you'll need:

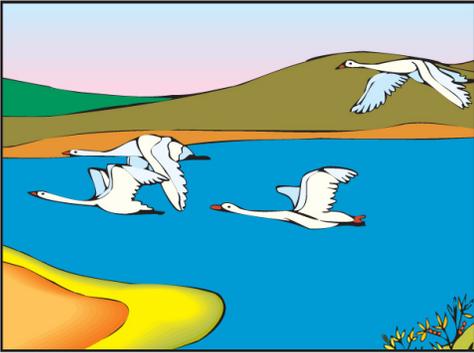
- Pieces of black, white, blue, red, yellow and green construction paper
- 6 ice cubes of the same shape and size

What you'll do:

Put one ice cube on each piece of paper and place them in the sun. Make sure all cubes are exposed to full sunlight. Observe which one melts the fastest, and which the slowest.



SEPTEMBER



UP, UP & AWAY

Can you imagine moving to a different house for every summer and winter? Some birds do. They are called **MIGRATORY BIRDS**.

Why would they leave their cozy nests and fly thousands of miles away? To follow their food source! In the fall, insects die or hibernate, so bug-eating birds must move south. Most birds of prey move south too since small rodents are hunkering down for the winter.

In the spring, birds move from their wintering grounds to their summer grounds for the breeding season because they need to find a place to raise their young. There is too much competition for living space in their winter grounds.

MAKE YOUR OWN BIRD FEEDER

More than **400 DIFFERENT TYPES OF BIRDS** call Maryland home. While some live here all year long and some just pass through seasonally, you can see them and enjoy their presence in your own backyard. (Don't worry if they don't show up right away — it may take a few days for them to find this new food source.)

What you'll need:

- A clean 2-liter bottle with lid
- Eye screw
- Wooden spoon
- Bird seed
- X-acto knife
- String or wire

What you'll do:

- Screw the eye screw onto the outside of the lid.
- Use the X-acto knife to make X-shaped slits on one side of the bottle.
- On the opposite side, cut out a small circle.
- Insert the spoon handle in through the circle and out through the X. The spoon should remain outside.
- Tie a string through the eyehook to make a circle.
- Add bird seed to the bottom.
- Put the lid back on and hang from a post or tree limb.
- Empty and wash weekly.



COLOR!

Check out all the creatures visiting this back yard! After you print out and color in this picture, search your own yard or local park with some friends or family members and see how many birds you can find!

