

Jumpers & Skaters

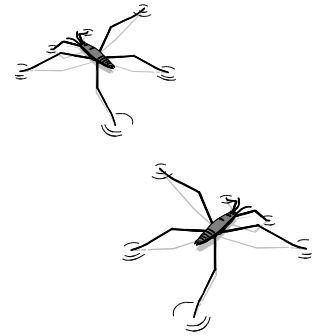
HERE ARE TWO INSECTS WITH UNUSUAL WAYS OF GETTING AROUND.

A Bug that can Walk on Water

DID YOU KNOW THERE ARE BUGS THAT CAN WALK ON WATER?

THEY'RE CALLED POND SKATERS, OR WATER STRIDERS. POND SKATERS ARE NOT EXACTLY FLOATING ON THE WATER. THEY STAND ON ITS SURFACE.

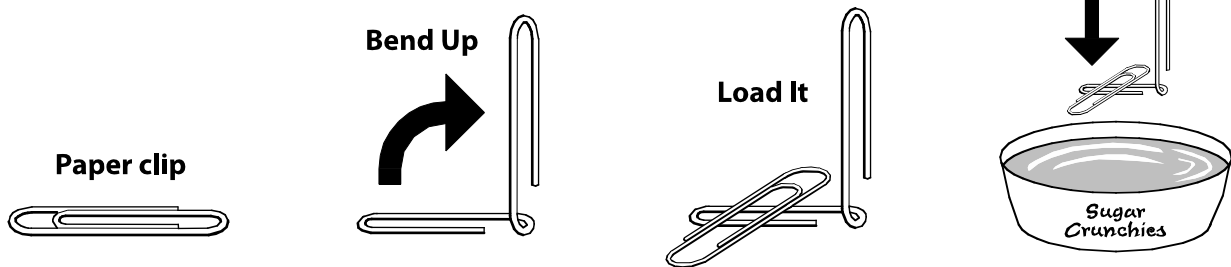
YOU CAN SEE HOW THIS WORKS IF YOU USE A PAPER CLIP FOR A POND SKATER.



Pond Skaters
also called
Water Striders

What You Need: A CLEAN BOWL OR LARGE CUP FILLED MOSTLY FULL OF WATER, AND SOME SMALL PAPER CLIPS.

What to Do: START BY MAKING A PAPER CLIP ELEVATOR, LIKE THIS:



NOW TRY TO LIFT A PAPER CLIP, KEEPING IT BALANCED ON THE SHELF OF THE ELEVATOR. IT TAKES A STEADY HAND.

LOWER THE PAPER CLIP INTO THE WATER WITH THE ELEVATOR. IF YOU'RE CAREFUL, THE PAPER CLIP WILL STAY ON THE SURFACE.

Why?

WHY DOESN'T THE PAPER CLIP SINK? BECAUSE WATER HAS SURFACE TENSION, WHICH MAKES IT A LITTLE BIT DIFFICULT FOR SOMETHING TO BREAK THROUGH THE SURFACE, WHETHER IT'S A PAPER CLIP OR A POND SKATER.

IF YOU HAVE LIQUID SOAP HANDY, PUT A DROP IN THE WATER NEAR THE PAPER CLIP. SOAP REDUCES SURFACE TENSION. WHAT DO YOU THINK WILL HAPPEN? TRY IT AND SEE.

Bizarre Bug Blurb:

OTHER INSECTS DON'T HAVE THE ABILITY TO STAND ON WATER. IF THEY CRASH LAND IN THE WATER, THEY BREAK THROUGH THE SURFACE AND ARE TRAPPED BY THE SURFACE TENSION. THEY BECOME PREY FOR THE POND SKATERS, WHO SKATE OVER AND SUCK THEIR JUICES LIKE A MILKSHAKE!

Flea Circus



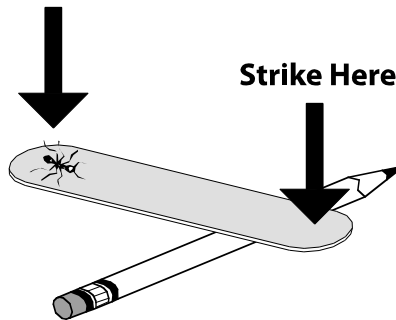
Flee, Flee!

A FLEA CAN JUMP 13 INCHES, WHICH IS ABOUT 200 TIMES ITS BODY LENGTH. 13 INCHES MAY NOT SEEM LIKE MUCH, BUT 200 TIMES YOUR BODY LENGTH - WHAT WOULD THAT BE LIKE?

What You Need: A CRAFT STICK AND THE TWO TINY BLACK ANTS THAT CAME IN YOUR KIT. (YOU'LL PRETEND THEY'RE FLEAS.) YOU PROVIDE A PENCIL.

What To Do:

Place Bug Here



Strike Here

MAKE A FLEA CATAPULT AND SET IT UP ON THE FLOOR OR CARPET. PLACE YOUR "ANT-FLEA" ON IT.

BE CAREFUL THAT YOU DON'T FLING THE BUG INTO SOMEONE'S EYE.

EXPERIMENT WITH THE POSITION OF THE PENCIL FOR THE BEST HEIGHT.

1 COULD YOU GET YOUR "FLEA" TO HIT THE CEILING?

2 YOUR BUG IS ABOUT $1/2$ " LONG. IF IT COULD JUMP 200 TIMES ITS LENGTH, HOW HIGH COULD IT JUMP?

3 IF YOU COULD JUMP 200 TIMES YOUR BODY LENGTH, HOW HIGH COULD YOU JUMP?

4 ARE THERE ANY BUILDINGS IN YOUR TOWN THAT ARE THAT TALL?

QUESTION: WHY DO FLEAS JUMP INSTEAD OF FLYING LIKE OTHER INSECTS?

ANSWER: FLEAS LIVE ON FURRY OR FEATHERED ANIMALS, WHERE WINGS WOULD JUST GET IN THE WAY. STILL, THEY HAVE TO JUMP HIGH ENOUGH TO REACH THEIR HOST ANIMAL. THIRTEEN INCHES WILL GET YOU PRETTY HIGH UP ON A DOG OR CAT.