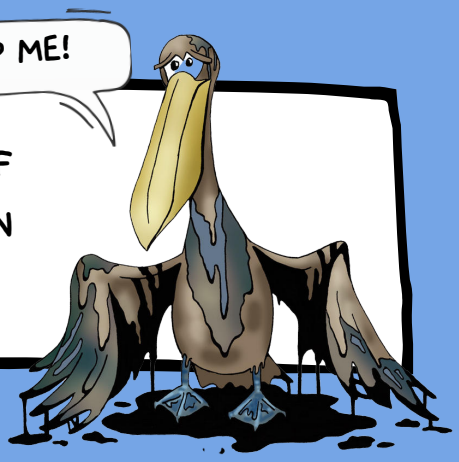
NAME: _____ DATE: _____

OIL SPILL SCIENCE INVESTIGATION

OH NO! SKIP THE PELICAN HAS FOUND HIMSELF COVERED IN POLLUTANTS AFTER A SHIP SUNK IN THE OCEAN AND LEAKED OIL...



AN OIL SPILL IS DIFFICULT TO CLEAN UP. YOUR JOB IS TO INVESTIGATE:

- HOW OIL REACTS WITH WATER
- HOW WILDLIFE IS AFFECTED
- WHAT TOOLS CAN BE USED TO CLEAN UP OIL SPILLS

SEE IF YOU CAN SAVE SKIP FROM THE OIL SPILL BY COMPLETING THE STEPS AND ANSWERING THE QUESTIONS BELOW...

QUESTIONS :

COMPLETE QUESTIONS 1-5 AS YOU DO THE OUTLINED STEPS

1. WHAT HAPPENED TO THE SIMULATED CRUDE OIL AS SOON AS IT WAS POURED INTO THE WATER? DID IT SINK? FLOAT? MIX IN? _____

_____

2. WHAT HAPPENED TO THE CRUDE OIL AFTER YOU WAITED 3 MINUTES? WAS THERE A CHANGE? _____

_____

3. WHAT HAPPENED TO THE FEATHER WHEN IT WAS DIPPED IN OIL? HOW MIGHT THIS AFFECT SKIP? _____

_____

4. HOW MUCH OIL DID THE SORBENT CLEAN UP? WAS THERE WATER COLLECTED AT THE SAME TIME? WHICH SORBENT WORKED THE BEST? _____

_____

5. BASED OFF THE ABOVE ANSWERS, DO YOU THINK YOU CAN CAN CLEAN UP THE OIL SPILL AND SAVE SKIP? _____

_____

YOU WILL NEED:

- CLEAR BOWL
- SMALL CUP
- TAP WATER
- VEGETABLE OIL
- COCOA POWDER
- BLUE FOOD COLOURING
- SORBENTS (PAPER TOWEL, COTTON BALLS, SPONGE)
- FEATHERS

METHOD:

1. FILL THE BOWL WITH TAP WATER, ADD BLUE FOOD COLOURING AND MIX THE SOLUTION
2. IN YOUR SMALL CUP, MIX 2 TABLESPOONS OF COCOA POWDER AND 3 TABLESPOONS OF VEGETABLE OIL TO SIMULATE CRUDE OIL
3. FROM A HEIGHT OF 1CM, SLOWLY POUR THE CRUDE OIL INTO THE BOWL AND OBSERVE FOR 3 MINUTES
4. NEXT, DIP A FEATHER INTO THE OIL AND ANALYSE WHAT HAPPENS
5. INDIVIDUALLY PLACE A SORBENT SAMPLE IN THE CENTRE OF THE BOWL AND ANALYSE HOW THE OIL IS CLEANED UP