

SELF PROPELLED BOATS



A SCIENTIFIC INVESTIGATION BY

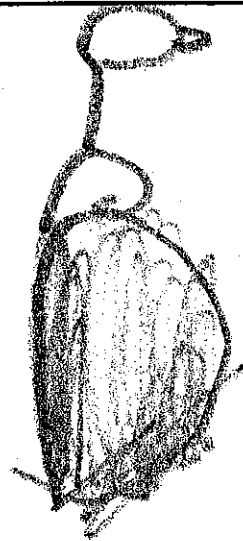
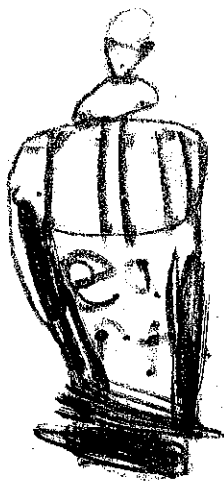
[REDACTED]

[REDACTED]



Why did we choose to study soap propelled boats?

We decided to study soap propelled boats. It will be fun!



What question did we choose to study?

Which liquid fun most distance in 15 seconds?

Important steps in our experiment.

We all designed a boat and trialled it.

We decided we needed a simple design with a keyhole at the stern.

A simple, sleek design was selected. About 100 copies were made.

The boats were carefully cut out.

We decided upon our question.

Everyone predicted which "liquid fuel" would be the best.

The sink was cleaned before every trial.

The water was measured to make sure it was always 2cm deep.

The water had to be settled and still.

The boat was gently placed at the starting line.

Using an eye dropper, 2 drops of liquid was inserted into the keyhole.

We timed the boat's movement for 15 seconds.

The distance was measured and recorded.

We graphed our results.

We compared our predictions with the results.

Which detergent did I think would be the best?

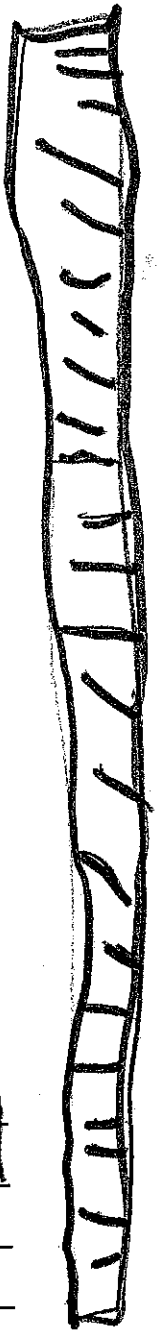
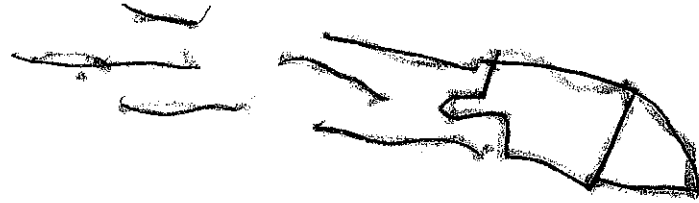
I predict The best fuel to move the boat will be because it has no...

Which detergent did the rest of the class think would provide the most power?

Hand. SOAP 0

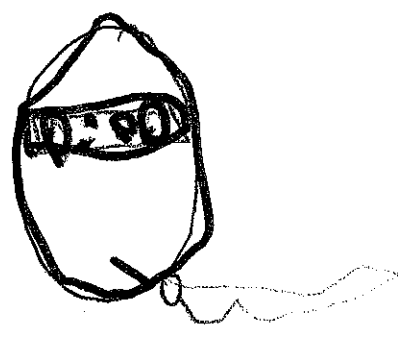


On the surface of water,
the layer of water that surrounds
the submerged part of the boat
is called the surface tension.
This is a sticky surface
force.

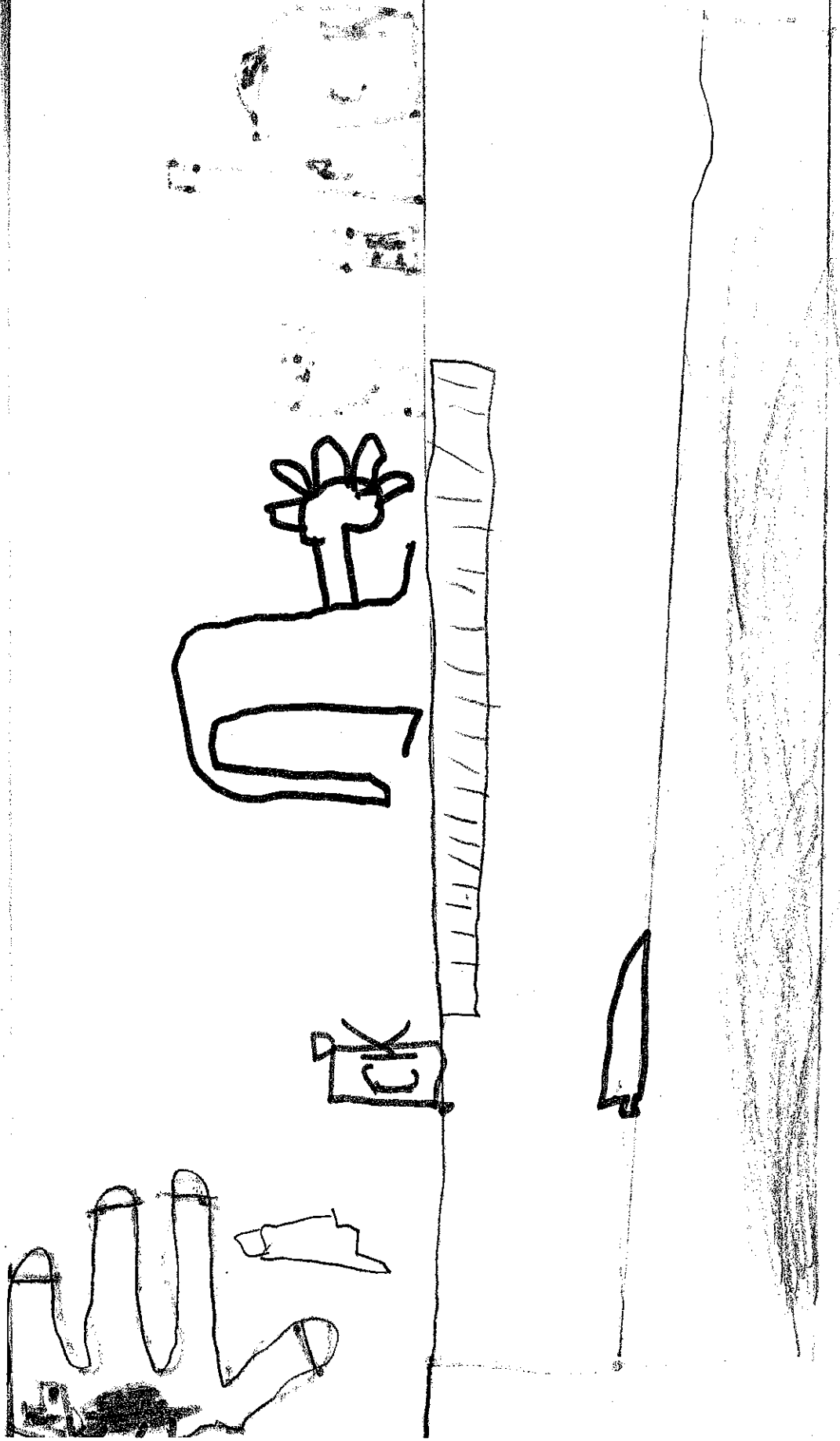


How did we work out which detergent provided the most power for the boat?

We decided that the best fuel moved the boat the most distance in fifteen seconds with only ten drops.



y



Access detection of out-expes
iment.

What was the one thing we decided to change?

The one thing we
changed in our
experiment was the liquid
used to propel the boat.



What did we have to keep the same?

To check for the best
I did we had to keep
everything else the

1. The π / e and shape of the bo
2. We always used the same,
3. we always measured ^{clean} ^{sink} ²⁰⁰
4. We gently ^{of wat} ^{er}
5. _____
6. _____

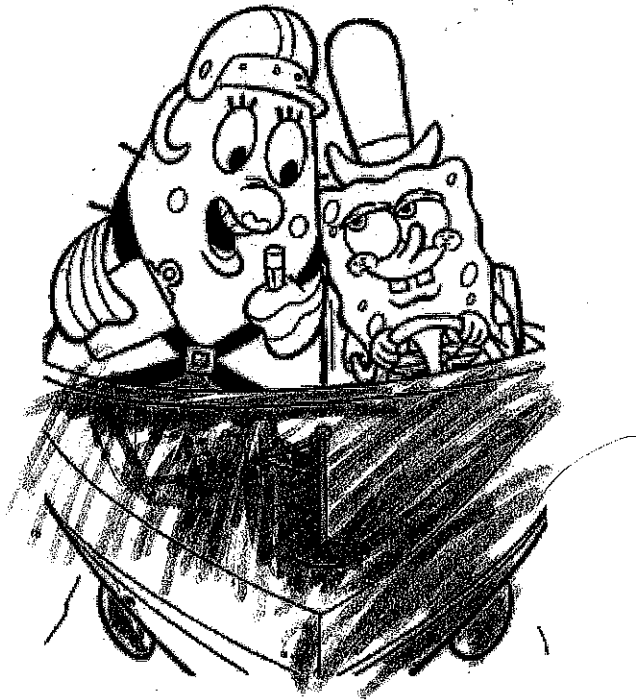
J-



I'm thinking The In Plu and The bot



my friends of holding the stuff



Which detergent powered the boat the furthest distance?

The best detergent for
our boats was the
dishwashing liquid. It powered
our boat 5 m.

How did we write up the results?

We worked out
the average distance
on a table and then made
a graph.

5 m
5
seconds.

The WINNERS were:

1. D. Shavashina 11 girls



2.

Buble Bath



3.

170 lbs hand soap



4.

Buble Bath



5.

20 Ke Dola