

AstraZeneca Science Teaching Trust / Leicester City Primary Science Project

## Pupil Cognitive Test

*Year 3 to 6 Version*

*June 2000*

*Science and experiments?*

*What do **you** know?*

*...follow Science Runner...*



My name is

.....

I am a ..... (boy/girl)

My class is

.....

My school is

.....

Ready to  
start?

GO...



Turn  
Over



*Science Runner is seeing things!*

1. It is dark.

Draw a picture to show how Science Runner can see the candle.



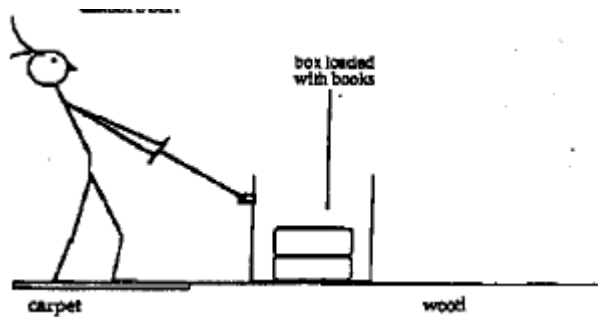
2. Draw a picture to show how Science Runner can see the book.



What good pictures! That's all on this one.

*Science Runner moves a box.*

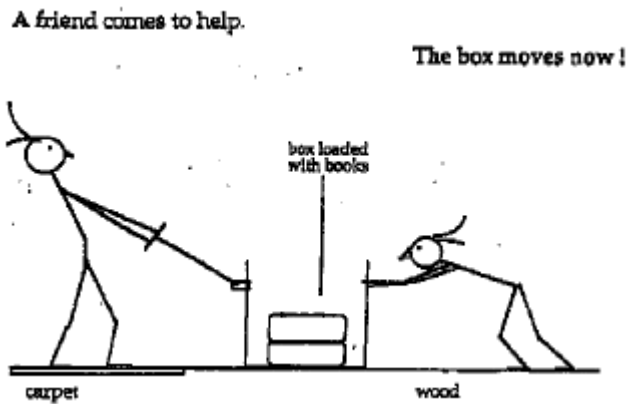
Science Runner is trying to pull this heavy box into the classroom.



Science Runner's force is pulling hard, but the box does not move. **Another force is stopping the box.**

1. What is the name of this force?

.....



2. When the box gets on the carpet, will it be easier to pull or harder? What do you think?

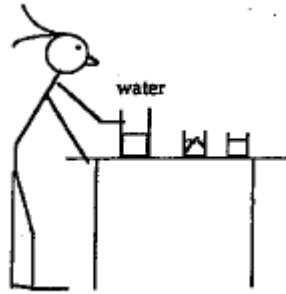
.....

3. Why do you say this?

.....

End of this one!

## Science Runner makes a mixture

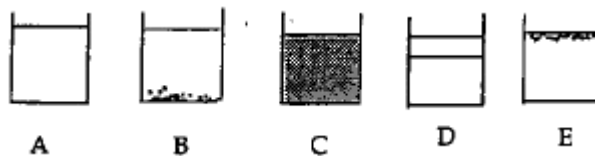


Science Runner gets some pepper from the kitchen and puts just a little bit in the water, **giving the water a good stir**. Science Runner then waits to see what happens. Science Runner then does more experiments with little bits of salt, candle wax, ...

		pepper	B
salt		lemon juice	
candle wax		coffee	
sand		wooden beads	
sugar		coca-cola	
cooking oil		rice	

Science Runner drew a picture each time.

Here are the pictures for the mixtures, but the names are not there!



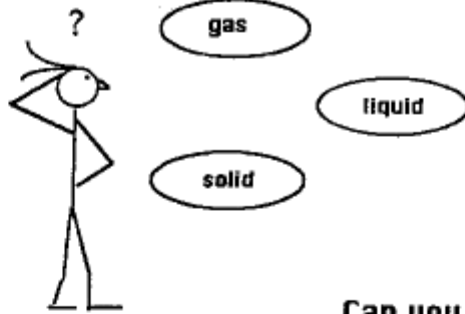
**You have to put the right mixture letter next to each item in the list.** Science Runner has done the first one for you and chosen picture B for pepper.

Can **you** do the others?

End of this one!

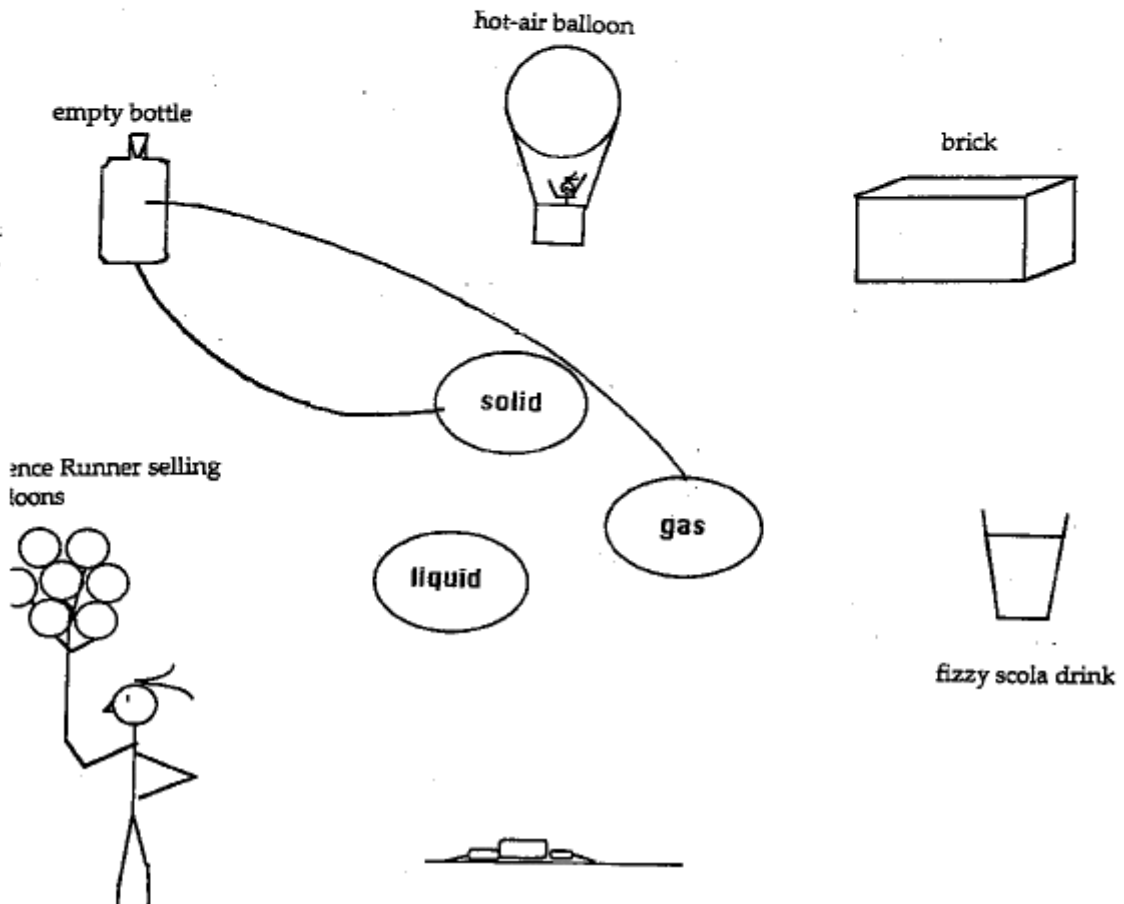
# Science runner gets the words sorted out

1.



Can you join the names to the pictures ?

Science Runner has done the first one for

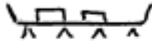


2.

Here are some different words.

Can you join the names to the pictures ?

Butter in a hot pan



Puddle in the sun



tea in hot water

melting

evaporating

dissolving

condensing



Orange juice in water



Pear juice



Chocolate on a radiator



Water inside window on a cold, wet day



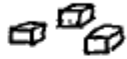
Candle burning



Washing on the line



Ice cubes on the table



melting

evaporating

dissolving

condensing



Sugar cubes in cold tea



A drinking glass full of ice



Steam from a kettle

Just two more

...on  
you  
go....Turn  
over  
→



3. List as many things as you can that **melt**.


4. List as many things as you can that **dissolve**.

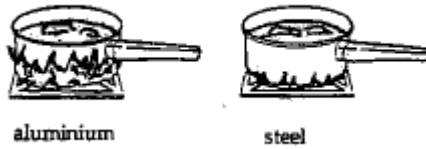

End of this one!

*Science Runner does the cooking*

Science Runner is cooking lots of potatoes in two pans. One pan is made of aluminium, the other is steel. Science Runner wants to know which pan cooks faster.



Here is a better view of the pans



Was this a fair test? .....

Why do you think this?

.....

.....

.....

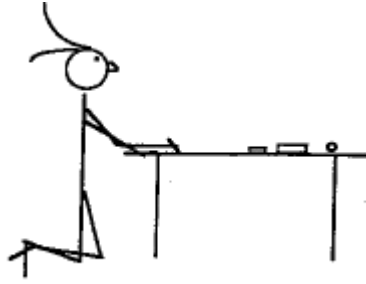
.....

.....

End of this one!

## Science Runner goes electrical

Science Runner is drawing pictures of things that make electricity.



1. What would you draw?

A large, empty rectangular box with a thin black border, intended for the student to draw their answer to the question.

Just one more page

...on  
you  
go....



Turn  
over

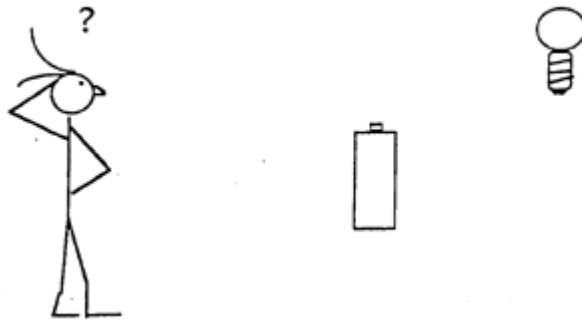




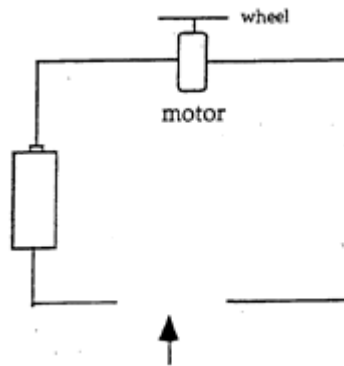




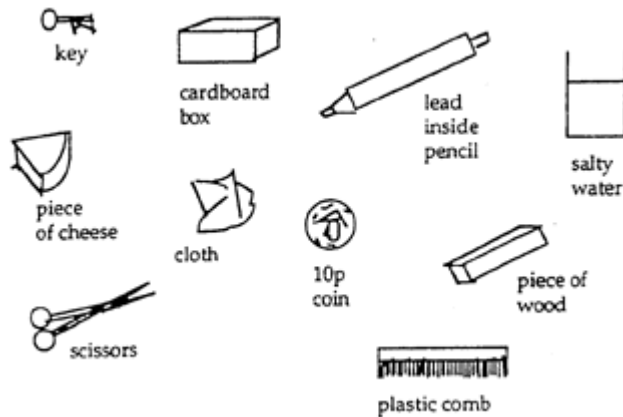
2. Science Runner now tries to work a bulb.  
Can you draw the wires to make it light?



3. Now, Science Runner does some tests with a motor.



**Put a circle** around the items which could go in the space and make the motor spin the wheel.



End of all the questions!

Thank you for trying your best!