

## Introduction

This is a flexible game idea can be used to recap and revise a topic. The questions are presented in a *PowerPoint* presentation, though they could be used independently with the teacher reading them out. There are four answers for each question and the students have to choose which they think is the odd one out. If every student is provided with four pieces of coloured card (red, yellow, green, white) then they can hold up the colour corresponding to their answer. The *Odd one Out* framework could also be used as a team quiz game, or with students writing down their answers.

## Running the activity

On opening the *PowerPoint* file the entry screen provides you with four options for pre-programmed quizzes. They have been written on the topics of solids, liquids and gases and physical properties and each quiz can be used with or without the answers being shown after each question. 'Left clicking' on its title can select the quiz.

Each student will need four small pieces of card coloured red, yellow, green and white for their answers (unless another means for answering is chosen, such as verbal discussion or writing). For each question there are four options to choose from. There is a "3,2,1, Choose!" countdown on the screen giving the students time to think about their answer and the teacher may choose to read the possible answers and give hints if necessary. The mouse can be clicked to show the answer, giving the opportunity for discussion and clarification.

If the countdown is too slow it can be moved forward to the next step by clicking on the mouse.

Please note that some of the examples towards the end of the solids, liquids and gases quiz may require some extra thought and consideration. For example, fizzy cola is a liquid and it releases gaseous bubbles. It is up to the teacher to decide the appropriate level of discussion for the class.

Using the coloured cards can be a good mechanism for teachers to assess students' understanding as individuals and give a good idea of the whole groups' progress.

## Safety

Do not let the pupils get over excited.

## More ideas

A blank version of the quiz slides is included in a second *PowerPoint* file. Four possible answers can be typed in and the "correct answer" box can be moved or erased.

We would be pleased to see any of the quizzes you may create. They can be emailed to [AdrianFenton@ase.org.uk](mailto:AdrianFenton@ase.org.uk)

If you know any students that are colour blind you could write the letters "a,b,c,d" onto their answer cards.

With some groups you may wish to pause between each question, reading and discussing the vocabulary before answering.

Pictures could be added to each question in a quiz to help students.

The quiz structure could be used in any part of the curriculum.

## Learning outcomes

Reinforcement of vocabulary and topic principles for solids, liquids and gases or example questions on physical properties (depending on the quiz chosen).

## Where the activity fits in

Revising solids, liquids and gases or a quiz on physical properties topics.

## Skills

Vocabulary and subject knowledge reinforcement.

## Acknowledgements

The *PowerPoint* file and notes were created by Adrian Fenton.

## Solids, Liquids, Gases Answers

a	b	c	d	Correct answer
wood	paper	brick	water	Water
air	water	milk	oil	Air
nitrogen	cork	rubber	paper	Nitrogen
petrol	ink	gold	rain	Gold
plastic	helium	leather	feather	Helium
ice cream	china	oxygen	nylon	Oxygen
paint	carbon dioxide	steam	nitrogen	Paint
fizzy cola	paper	metal	bone	Fizzy cola
rubber	ice	glass	methane	Methane
plastic	metal	oxygen	coin	Oxygen

## Physical Properties Answers

a	b	c	d	Correct answer	Reason
gravity	air resistance	friction	mass	Mass	The others are forces
light	heat	Celsius	sound	Celsius	The others are forms of energy
centimetre	kilometre	second	millimetre	Second	The others are units of distance
Newtons	gram	kilogram	milligram	Newtons	The others are units of mass
kelvin	Celsius	heat	Fahrenheit	Heat	The others are units of temperature
sound	kinetic	chemical	upthrust	Upthrust	The others are types of energy
millimetre	year	millisecond	hour	Millimetre	The others are units of time
gold	plastic	aluminium	copper	Plastic	The others all conduct electricity
kettle	electric fire	toaster	stereo	Stereo	The others produce heat from electricity
Nuclear	light bulb	wave	coal	Light bulb	The others can all be used to make electricity