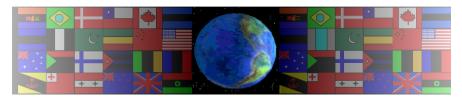
WHAT ARE CAPACITORS?

V.Ryan © 2000 - 2013

On behalf of The World Association of Technology Teachers

W.A.T.T.



World Association of Technology Teachers

This exercise can be printed and used by teachers and students. It is recommended that you view the website (www.technologystudent.com) before attempting the design sheet.

THESE MATERIALS CAN BE PRINTED AND USED BY TEACHERS AND STUDENTS.

THEY MUST NOT BE EDITED IN ANY WAY OR PLACED ON ANY OTHER MEDIA INCLUDING WEB SITES AND INTRANETS.

NOT FOR COMMERCIAL USE.

THIS WORK IS PROTECTED BY COPYRIGHT LAW.

IT IS ILLEGAL TO DISPLAY THIS WORK ON ANY WEBSITE/MEDIA STORAGE OTHER THAN www.technologystudent.com

WHAT ARE CAPACITORS?

V.Ryan © 2013 World Association of Technology Teachers

INTRODUCTION - CAPACITORS

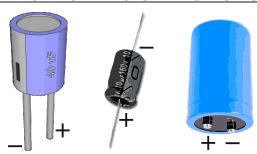


Capacitors are components that are used to store an electrical charge. They are often used in timer circuits. A capacitor may be used with a resistor to produce a timer. Timers are found in a large range of electronic devices

www.technologystudent.com

Sometimes capacitors are used to smooth the current in a circuit, as they can prevent false triggering of other components such as relays.

ELECTROLYTIC CAPACITORS



www.technologystudent.com

Electrolytic capacitors are 'polarised', which means they have a positive and negative lead and must be positioned in a circuit the right way round (the positive lead must go to the positive side of the circuit).

They have a much higher capacitance than non-electrolytic capacitors.

CERAMIC CAPACITORS



Non-electrolytic capacitors usually have a low capacitance compared to electrolytic capacitors.

www.technologystudent.com

They are not polarised (do not have a positive and negative lead) and can be placed anyway round in a circuit.

They are normally used to smooth the current (flow of electricity) in a circuit, so that the circuit works without faults occurring.

1.	In genera	l, why are	capacitors	often fo	ound in o	circuits.?
----	-----------	------------	------------	----------	-----------	------------

3 marks

2. How do electrolytic and ceramic capacitors differ ?

4 marks