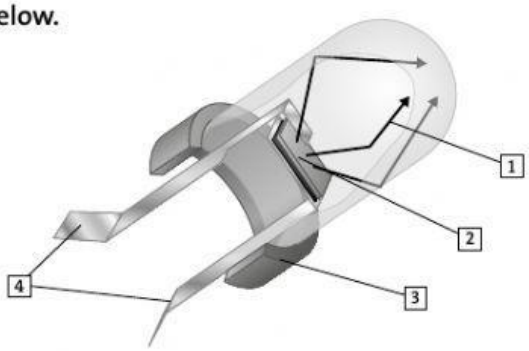
1 Label the diagram with the parts listed below.

emitted light beams	terminal pins
diode	transparent plastic case

1 _____
2 _____
3 _____
4 _____



2 Complete the text with the words listed below.

diodes	protects	blocks	direction	electronics

A device that _____[1] current in one direction while letting current flow in another _____[2] is called a diode. _____[3] can be used in a number of ways. A device that uses batteries often contains a diode that _____[4] the device if you insert the batteries back to front . The diode simply blocks any current from leaving the battery if it is reversed – this protects the sensitive _____[5] in the device.

3 Choose the correct word to answer the questions.

1 What do capacitors store?
a protons **b** neutrons **c** electrons

2 What separates the two terminals inside a capacitor?
a metal **b** water **c** nonconductive material

3 What types of devices do Mylar capacitors usually power?
a radio tuning circuits **b** timing circuits **c** antennas

4 If you charge a capacitor using a 1.5-Volt battery, how much voltage will the capacitor gain?
a 0 Volts **b** 1.5 Volts **c** 3 Volts

4 Read the text and answer the questions.

Integrated circuits

There are two basic types of integrated circuit (IC) – monolithic and hybrid. Monolithic ICs include the entire circuit on a single silicon chip. They can range in complexity from a few transistors to millions of transistors on a computer microprocessor chip. A hybrid IC has a circuit with several chips enclosed in a single package. The chips in a hybrid IC may be a combination of transistors, resistors, capacitors, and monolithic IC chips. A printed circuit board, or PCB, holds an electronic circuit together.

1 What are the two basic types of integrated circuits?
_____

2 Which type of IC includes the entire circuit on a single silicon chip?
_____

3 The chips in a hybrid IC may be a combination of which components?
_____

4 What is PCB an abbreviation for?
_____