Colegio Industrial Andrés Bello López
Diego de Almagro 222, Belloto, Quilpué.
www.colegioandresbellolopez.cl
Lorena Arancibia Estay

4° B

English worksheet: Electronic circuits

Name:..... **Date:**.....

SKILL(S)	• Reading comprehension, and written production
CONTENT(S)	• Vocabulary related to electronic components and circuits.
OBJECTIVE (S)	• Read and understand general and specific information about electronic circuits and components.

Reading Comprehension

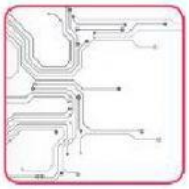
A.- Match the following concepts with the corresponding picture.

Wire - Capacitor - Quartz crystal - Inductor – Gadget- Electronic circuit - Diode - Trace - Relay - Integrated circuit

1. _____

2. _____

3. _____


4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

B. Read the text, highlight the concepts related to the field of electronics and write 3 important ideas.

1.- .....
2.- .....
3.- .....

. Read the text and match column A with column B to form complete sentences.

	A		B
1.	Electronic gadgets	_____	are essential components of an electronic circuit.
2.	An electronic circuit	_____	has several components and conductive wires to connect them, forming a loop.
3.	A printed circuit board	_____	can fit inside a small silicon chip.
4.	Resistors, capacitators and diodes	_____	can't make current flow.
5.	ICs	_____	have electronic circuits, which are the lifelines of them.
		_____	is a type of electronic circuit along with open, closed, short, and integrated circuits.

LIVEWORKSHEETS

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ELECTRONIC CIRCUITS

Electronic gadgets have become an integral part of our lives since they have a wide range of applications in the modern world.
These gadgets have electronic circuits that can control machines and process information, so they can be defined as the lifelines of various electrical appliances.
An electronic circuit is a structure that directs and controls electric current to perform various functions including signal amplification, computation, and data transfer.
An electronic circuit comprises several different components such as resistors, transistors, capacitors, inductors, diodes, relays, quartz crystals, and light-emitting diodes, among others. Conductive wires or traces are used to connect the components to each other and the circuit is complete only if it starts and ends at the same point, forming a loop.
Among different types of electronic circuits, we can find open circuits, closed circuits, short circuits, Printed Circuit Boards (PCBs), and integrated circuits (ICs).
Open circuits are the ones where current can't flow because one or more components are disconnected either intentionally, by using a switch, or accidentally due to broken parts.
Closed circuits are the ones that form a loop without any interruptions. Even if a circuit is connected to a dead battery not performing any work, it is still considered a closed circuit.
In the case of short circuits, a low-resistance connection forms between two points in an electric circuit. As a result, the current tends to flow through this newly formed connection rather than along the intended path. Unfortunately, they have usually led to serious accidents as the current can flow at a dangerously high level, damaging electronic equipment, causing batteries to explode, and even starting a fire in commercial and residential buildings.
Printed Circuit Boards comprise a plastic board with connecting copper tracks on one side and lots of holes to affix the components. The layout of the circuit board is printed chemically onto the plastic board.
Although PCBs can offer a lot of advantages, most modern instruments such as computers and mobiles require complex circuits, having thousands and even millions of components. That's where integrated circuits come in. ICs are the tiny electronic circuits that can fit inside a small silicon chip, increasing the efficiency of electronic devices and reducing their size as well as manufacturing cost.

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