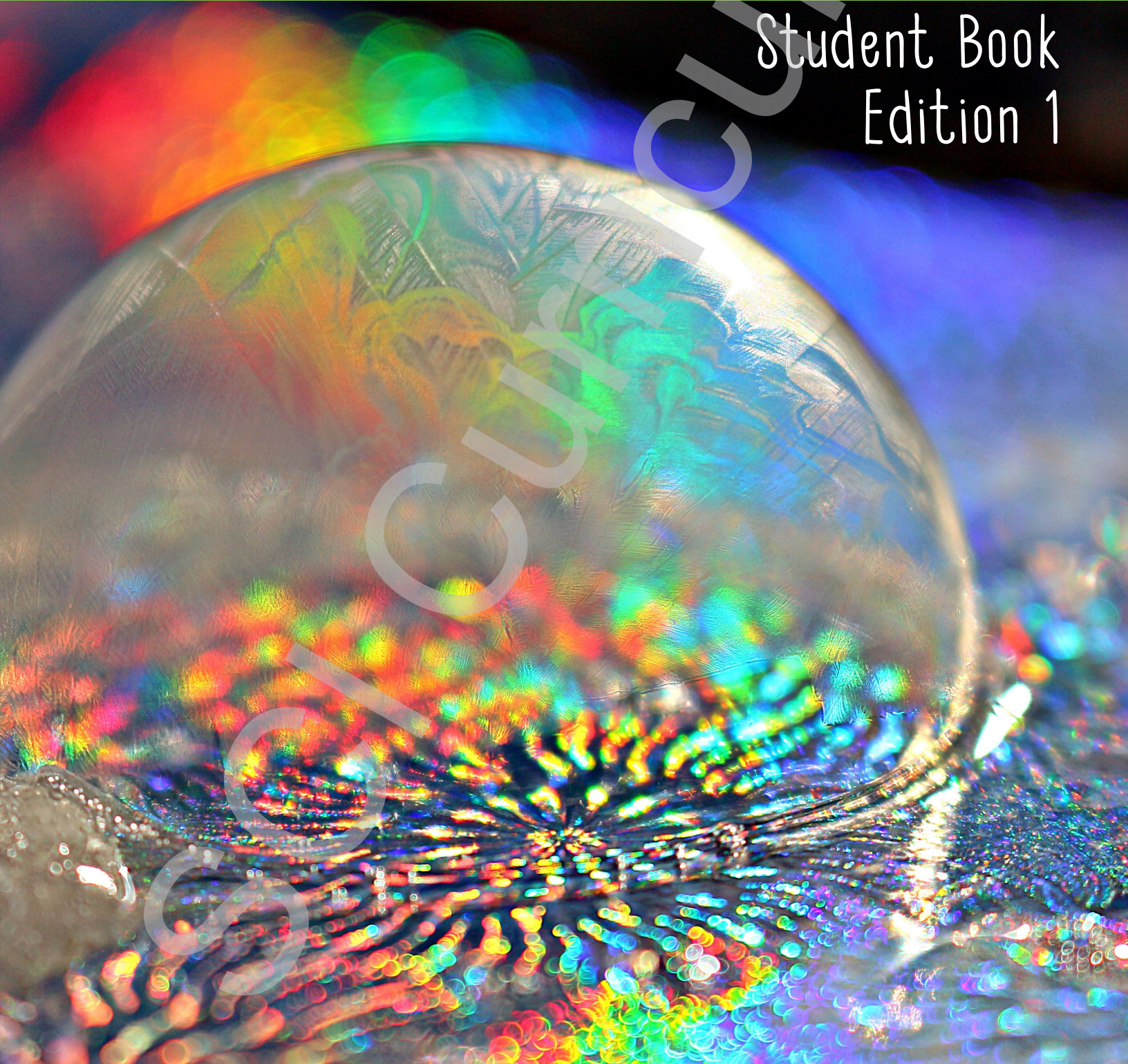




Scientific
Connections
through
Inquiry

LEVEL 5

Student Book
Edition 1

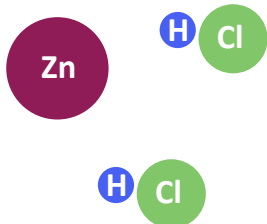
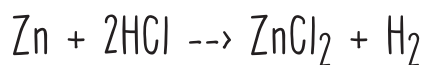


Chemical Reactions

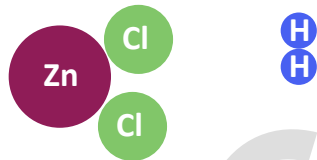
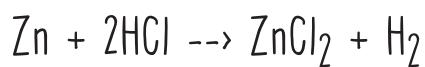
Cut out the elements on the next page. Use them to build the compounds on the left side of the chemical equations on the following page. Then, using only the same atoms, rearrange the atoms to form the compounds on the right side of the chemical equation. Note how no atoms are created or destroyed, they are only rearranged.

Example:

First, build the left side of the chemical equation:



Next, rearrange the same pieces to create the right side of the equation:



Note: A number before a compound means there are multiple molecules (e.g., there are two HCl molecules on the left side of the above equation). A small number after an element means there are multiple atoms of that element in the molecule (e.g., there are two Cl atoms in ZnCl_2).

Herd Immunity

Initial population vaccinated _____
 Initial population unvaccinated _____

Round	Number of people newly infected	Total number of people infected

Initial population vaccinated _____
 Initial population unvaccinated _____

Round	Number of people newly infected	Total number of people infected

Initial population vaccinated _____
 Initial population unvaccinated _____

Round	Number of people newly infected	Total number of people infected

Initial population vaccinated _____
 Initial population unvaccinated _____

Round	Number of people newly infected	Total number of people infected

Initial population vaccinated _____
 Initial population unvaccinated _____

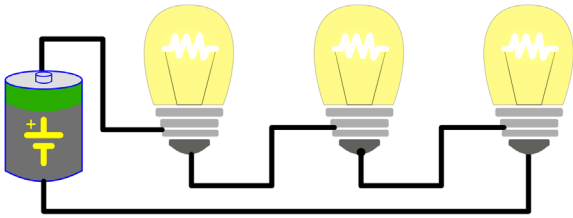
Round	Number of people newly infected	Total number of people infected

Initial population vaccinated _____
 Initial population unvaccinated _____

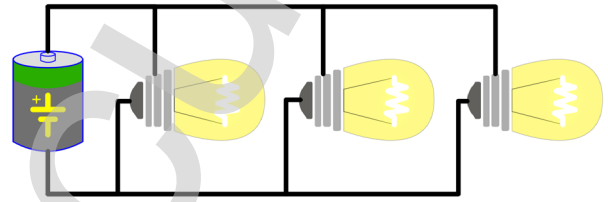
Round	Number of people newly infected	Total number of people infected

Series or Parallel

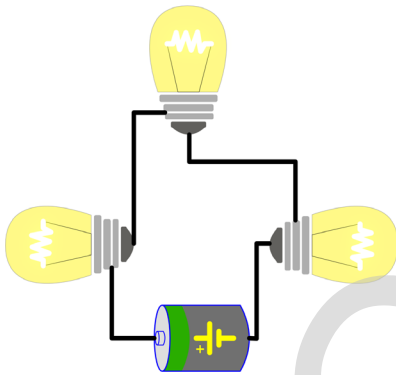
Examine the circuits depicted below and identify them as being set up in series, parallel, or both.



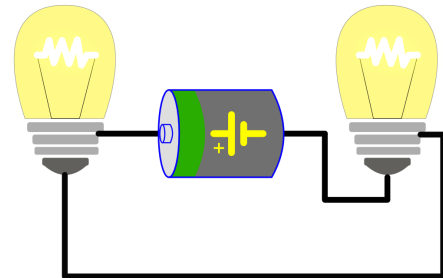
Series or parallel?



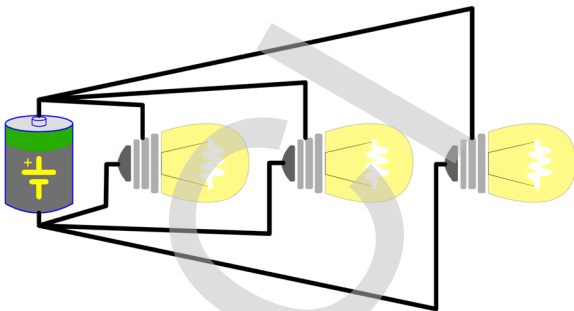
Series or parallel?



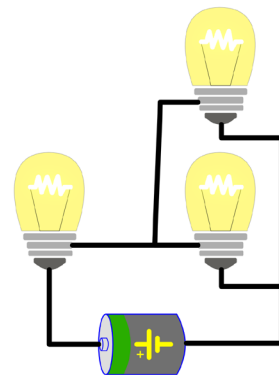
Series or parallel?



Series or parallel?



Series or parallel?

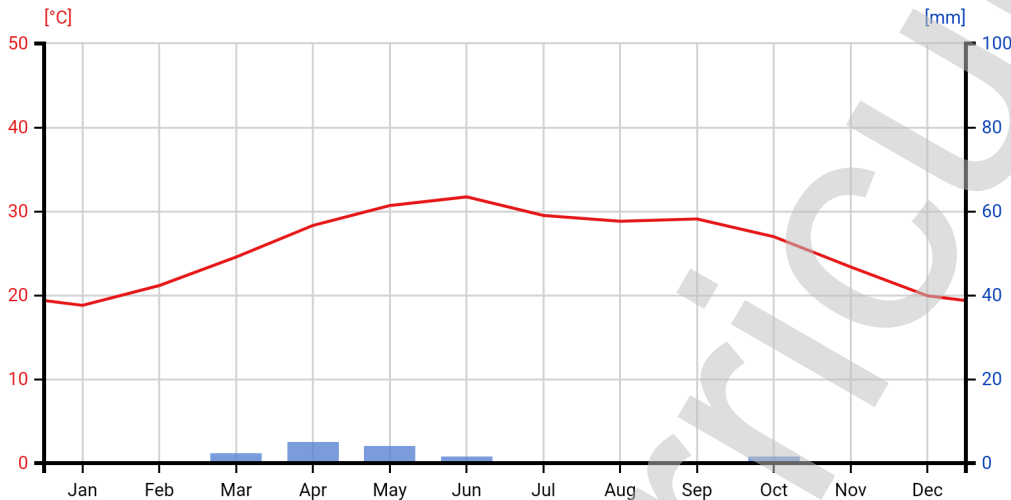


Series, parallel?

Climate Graphs

Desert Thumrait, Oman

17.67N, 54.03E | Elevation: 467 m | Climate Class: BWh | Years: 1990-2019



Month	Temp	Precip
Jan	18.8	0.4
Feb	21.2	0.3
Mar	24.6	2.3
Apr	28.3	5.2
May	30.7	4.1
Jun	31.7	1.6
Jul	29.5	0.1
Aug	28.8	0.5
Sep	29.1	0.4
Oct	27.0	1.7
Nov	23.4	0.4
Dec	20.0	0.3

Temperature Mean: 26.1 °C

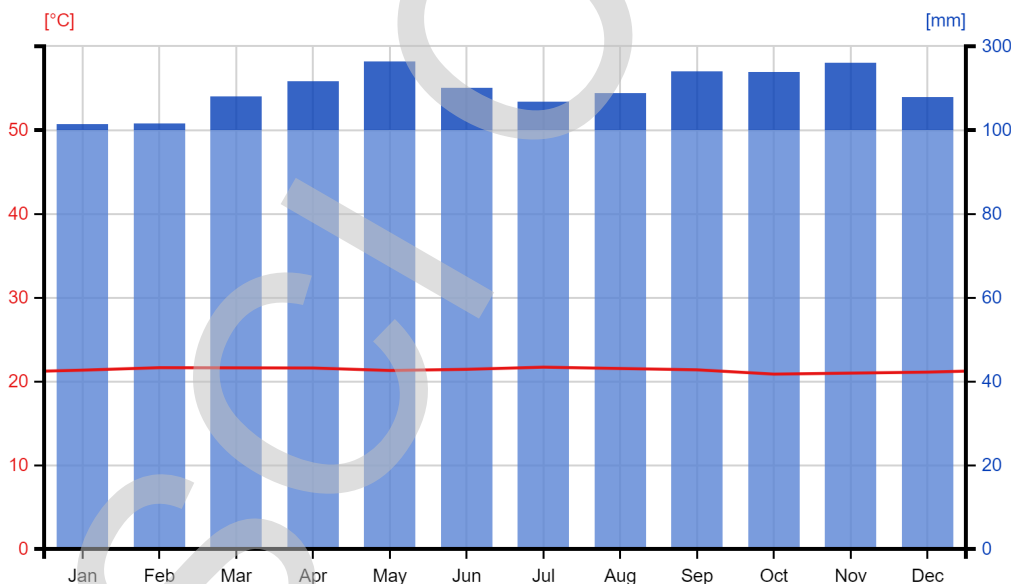
Precipitation Sum: 17.4 mm

Data Source: CRU Time Series v4.04
<https://catalogue.ceda.ac.uk/uuid/89e1e34ec3554dc98594a5732622bce9>

ClimateCharts.net

Rainforest Jericó, Antioquia, Colombia

5.686N, 75.76W | Elevation: 2255 m | Climate Class: Af | Years: 1990-2019



Month	Temp	Precip
Jan	21.4	114.0
Feb	21.6	115.7
Mar	21.6	180.6
Apr	21.6	216.1
May	21.3	263.4
Jun	21.5	201.1
Jul	21.7	167.0
Aug	21.6	188.2
Sep	21.4	239.8
Oct	20.9	238.0
Nov	21.0	261.1
Dec	21.1	178.1

Temperature Mean: 21.4 °C

Precipitation Sum: 2363.1 mm

Data Source: CRU Time Series v4.04
<https://catalogue.ceda.ac.uk/uuid/89e1e34ec3554dc98594a5732622bce9>

ClimateCharts.net