FORCES AND MACHINES

1 **Use the words to complete the text about forces.**

temporarily - move - changes - break - direction - shape - permanently

Forces cause _____. They can make objects change _____ or break.

Some objects change their shape _____ and do not return to their initial shape.

Other objects change their shape _____ and return to their initial shape. Rigid objects _____ when sufficient force is applied.

Forces can also make objects start to _____, change _____ or stop.

2 **Solve the problem.**

A motorist drives 100 kilometres in one hour. How many kilometres will he drive in three hours if he maintains the same speed?

3 **Calculate the speeds. Then, answer the questions.**

a. Andrea drives 400 km to the seaside. It takes her five hours.

What is her average speed? _____

b. David takes two hours to drive to his dad's house. The distance is 180 km.

What is his average speed? _____

- How can they know their speed at a particular moment?

_____

- What two forces slow down moving cars?

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4 **Read these definitions of machine components and write the names.**

cover - mechanism - sensors - engine - gears - springs

a. These allow a machine to detect information: _____

b. This produces movement by transforming chemical energy into mechanical energy: _____

c. This outer part protects the machine: _____

d. Several operating parts that work together: _____

e. These are wheels with teeth: _____

f. These are coils that store and release energy: _____

5 **Cross out (✗) the odd one out. Then, write *modern structure, home, free time* or *communication*.**

a. animation	exercise machine	refrigerator	motion gaming	_____
b. tower	telephone	the Internet	social networks	_____
c. pillar	beam	foundation	animation	_____
d. dishwasher	bridge	thermostat	refrigerator	_____

6 **Unscramble the words and write the names of eight machine components. Then, tick (✓) the ones that may work together in a mechanism.**

a. ehwle: _____ ☐

b. torom: _____ ☐

c. xela: _____ ☐

d. neesrc: _____ ☐

e. cetsururt: _____ ☐

f. nicah: _____ ☐

g. tidarcino: _____ ☐

h. revle: _____ ☐

7 **Circle the advances in modern life and classify them.**

bridgeradioexercisemachinedishwasherelectronicmailanimationtowerdualflushtoilet

modern structure	home	free time	communication