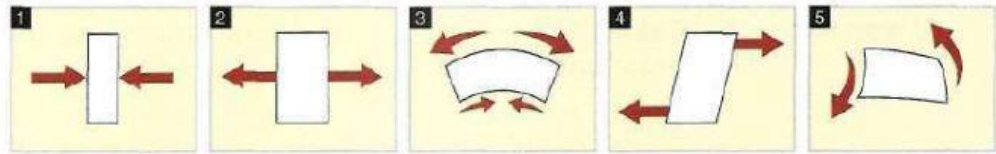


Vocabulary

6 Match the diagrams with (a) the names of the forces and (b) their descriptions.



- (a) bending, compression, shear, tension, torsion
 (b) squeezing or pressing together; sliding in opposite directions; stretching or pulling apart; twisting; squeezing one side + stretching the other side

Language

Noun + noun combinations are very common in technical English.

Examples: acceleration sensors (= sensors which measure acceleration); vehicle crash tests (= tests which crash a vehicle to measure its safety); a side impact crash dummy (= a dummy which measures the impact from the side in a crash).



gas flow meter



engine speed dial



tyre pressure gauge



bass volume indicator

7 Find phrases in the article in 5 which mean the same as these. All the words in the phrases must be nouns.

- 1 forces which pull something apart
- 2 sensors which detect movement or motion
- 3 deflection of the side of the chest
- 4 crashes which are caused by an impact from the front
- 5 a dummy which is used for testing the impact of a crash from the front

8 Expand these phrases. You can change words and add information.

- 1 a gas flow meter = a meter which measures/for measuring the flow of gas (along a pipe)
- 2 an engine speed dial = _____
- 3 a tyre pressure gauge = _____
- 4 a bass volume indicator = _____
- 5 an air pressure sensor = _____
- 6 a fuel intake port = _____

9 Make full sentence definitions from 8.

Example: 1 A gas flow meter is a meter which measures the flow of gas along a pipe.

Task 10 List some sensors used in your industry. Complete a table like this one. If possible, work in small groups with others from the same industry.

Industry: civil engineering and construction		
Name of sensor	Function/Use	Application
strain gauge	to measure deformation of structures	high-rise buildings, bridges, roads

11 Explain to the class about the sensors you have listed in your table.

In the field of civil engineering and construction, strain gauges are used for measuring the deformation of structures. They're used in high-rise buildings, bridges and roads, for example.