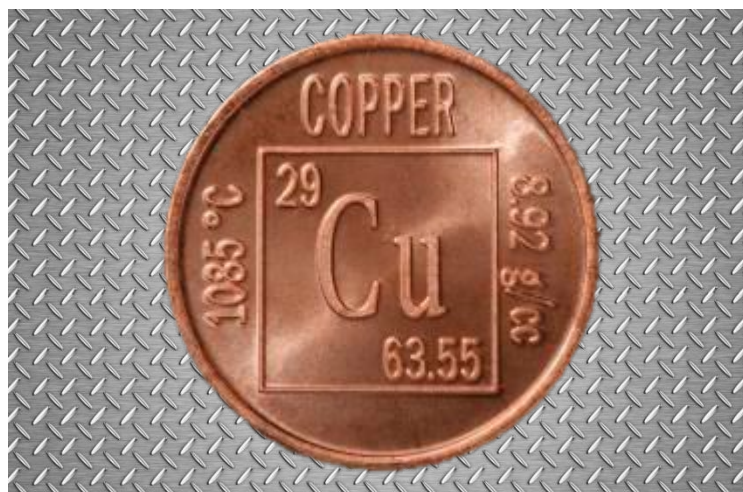


ГАПОУ «ПОЛИТЕХНИЧЕСКИЙ КОЛЛЕДЖ № 8  
ИМЕНИ ДВАЖДЫ ГЕРОЯ СОВЕТСКОГО СОЮЗА И.Ф.

ПАВЛОВА»

# ENGINEERING MATERIALS. MECH ANISMS.



ВЫПОЛНИЛА:  
АЛЕЕВА ЛЮБОВЬ ОЛЕГОВНА  
ПРЕПОДАВАТЕЛЬ  
АНГЛИЙСКОГО ЯЗЫКА

2016 Г.

# READING SCANNING TABLES

In engineering it is important to practise reading tables, charts, diagrams, and graphs because so much information is presented in these ways. We will start in this unit with a table.

Scanning is the best strategy for finding information in a table. With scanning, you know before you read what sort of information you are searching for. To scan a table, you move your eyes up and down the columns until you find the word or words you want. To scan quickly, you must learn to ignore any information which will not help you with your task.



# REMEMBER THE WORDS

- SOFT МЯГКИ
- DUCTILE <sup>Д</sup>КОВКИЙ,
- MALLEABLE <sup>Т</sup>ЯГУЧИЙ, <sup>Д</sup>КОВКИЙ,
- TOUGH <sup>Ж</sup>ЕСТКИЙ, <sup>П</sup>ЛАСТИЧНЫЙ
- SCRATCH-RESISTANT <sup>П</sup>РОЧНЫЙ  
устойчив к механическим повреждениям
- CONDUCTIVE ПРОВОДЯЩИЙ (ТОК,  
ТЕПЛО)
- DURABLE AND HARD <sup>И</sup>ЗНОСОСТОЙКИЙ (ПРОЧНЫЙ) И
- STIFF AND BRITTLE <sup>Ж</sup>ЕСТКИЙ И <sup>Т</sup>ВЕРДЫЙ <sup>Х</sup>РУПКИЙ





## **Language study** *Making definitions*

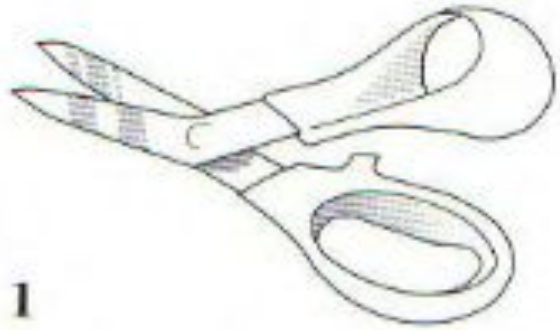
Study these facts from the table about aluminium:

- 1 Aluminium is a light metal.
- 2 Aluminium is used to make aircraft.

We can link these facts to make a definition of aluminium:

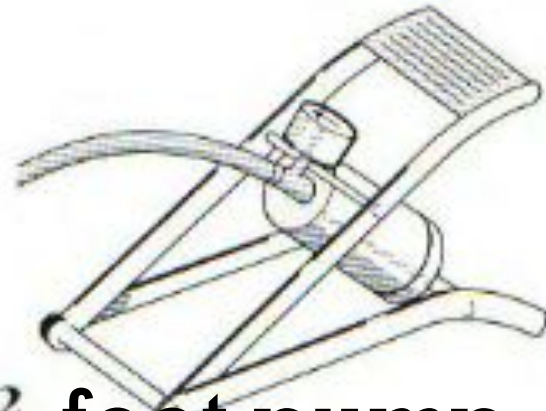
- 1+2 *Aluminium is a light metal **which** is used to make aircraft.*





1

**scissors**



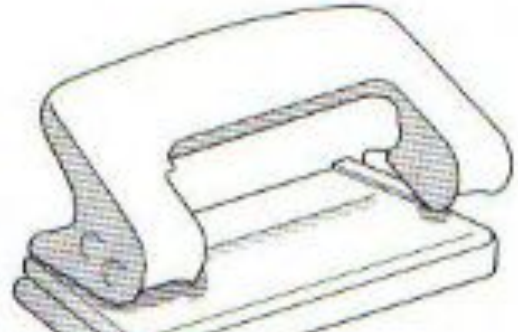
2

**foot pump**



3

**clamp, tongs**



4

**hole punch**



5

**tap**

# IDENTIFY THE SIMPLE MECHANISMS



Scan the text opposite quickly to find out which of these mechanisms are mentioned.

cam  
tap  
pendulum

foot pump  
escalator

tap

pendulum

escalator

cam

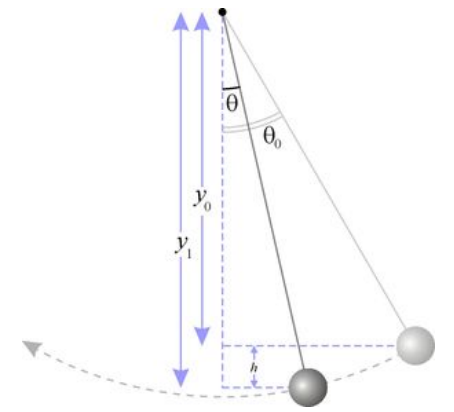


1. Cam converts the rotary motion of the engine into the reciprocating motion required to operate the valves.
2. Oscillating is swinging backwards and forwards.
3. Plastic pipes are formed by forcing plastic through dies.
4. Light switch, water tap, lift, clock, paper trimmer.
5. Crankshaft changes the reciprocating motion of a piston into a rotary motion
6. Paper trimmer
7. To form car body panels mechanisms that deliver the power to do their work are used. They provide the forces to press steel sheets into necessary shape.





THE TECH. WORDS IN **COLUMN A**  
ARE SIMILAR IN  
MEANING TO THE MORE GENERAL



**ENGLISH IN**

1) oscillates  
2) rotates

3) reciprocates

4) has a linear motion

5) converts

6) motion

7) escalator

8) sheets

a) changes

b) large, thin, flat pieces

c) moving stairs

d) goes round and round

e) movement

f) goes in a line

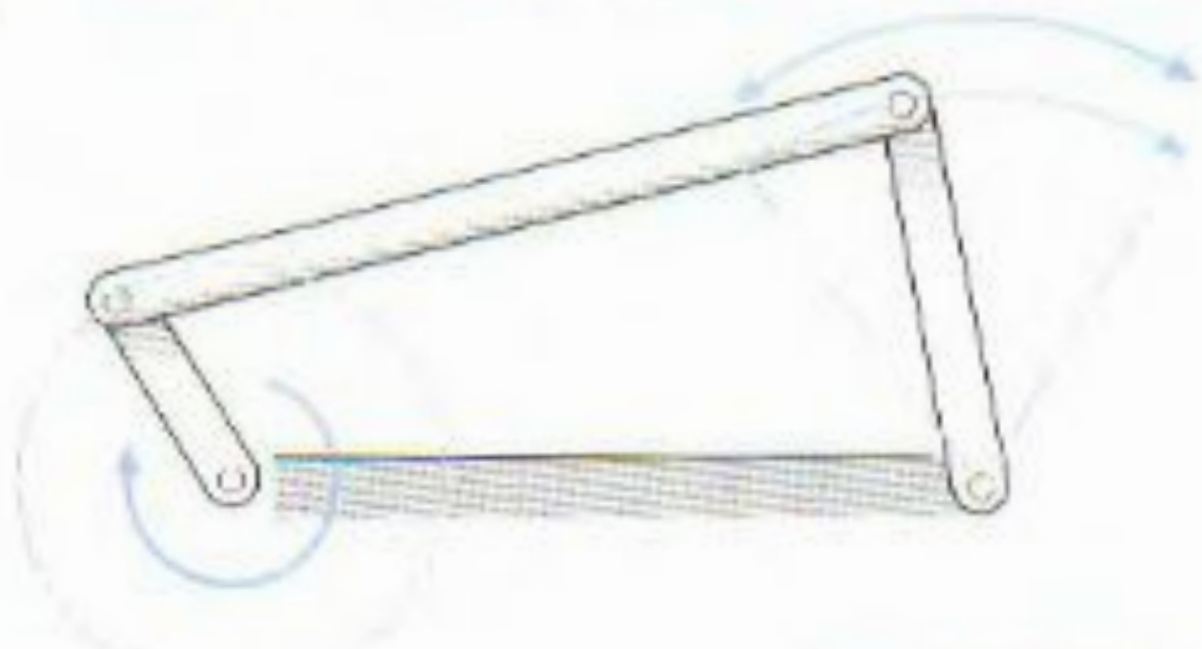
g) swing backwards and forwards

h) goes up and down





Try to explain how this simple mechanism operates using whatever English you know. Write your explanation down. Compare your explanation with the technical explanation given on page 4 of the Answer Book. Learn any technical terms which are unfamiliar to you.



**педаль, ножной привод**

Treadle linkage

**рычажный механизм, сцепление**

**рычажный механизм педали**



Treadle linkage



# IF YOU DON'T UNDERSTAND WHAT YOUR PARTNER SAYS, USE THE QUESTIONS:

- 1 Could you say that again/repeat that, please?
- 2 What do you mean by X?
- 3 Where exactly is the X?
- 4 What shape is the X?
- 5 How does the X move?



## СПИСОК ЛИТЕРАТУРЫ

1. Глендиннинг, Э. Oxford English for Electrical and Mechanical Engineering / Э. Глендиннинг, Н. Глендиннинг. – «Oxford University Press», 1995.
2. Публикация в блоге пользователя gim koon koh: treadle linkage. 2010 г. / видеохостинг youtube.ru [Электронный ресурс] / Режим доступа:  
[www.youtube.com/watch?v=ZkoLYNyW69g](http://www.youtube.com/watch?v=ZkoLYNyW69g)

