



EOI-OÍDÍ NA h-ÉIREANN
IRISH SCIENCE TEACHERS' ASSOCIATION

Senior Science Quiz 2018
Thursday 15th November

Round 1

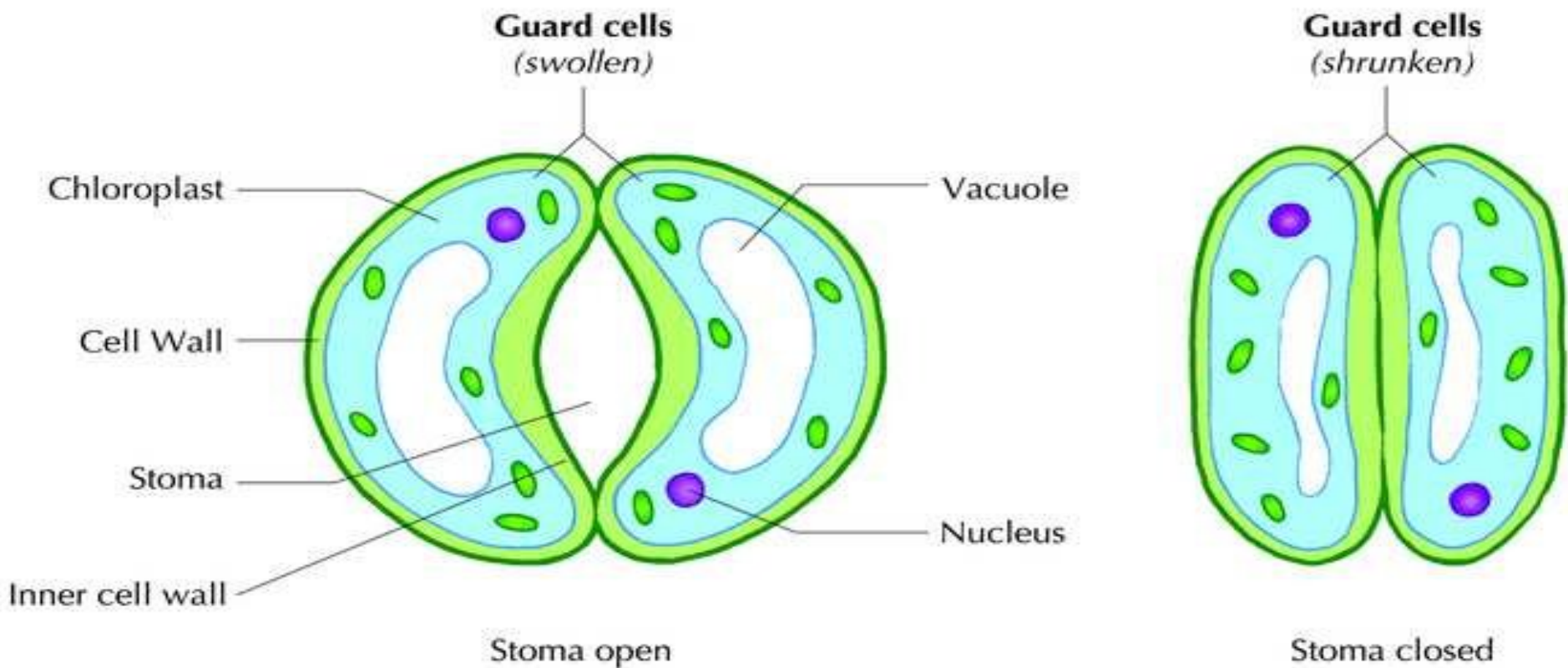


United Nations
Educational, Scientific and
Cultural Organization



International Year
of the Periodic Table
of Chemical Elements

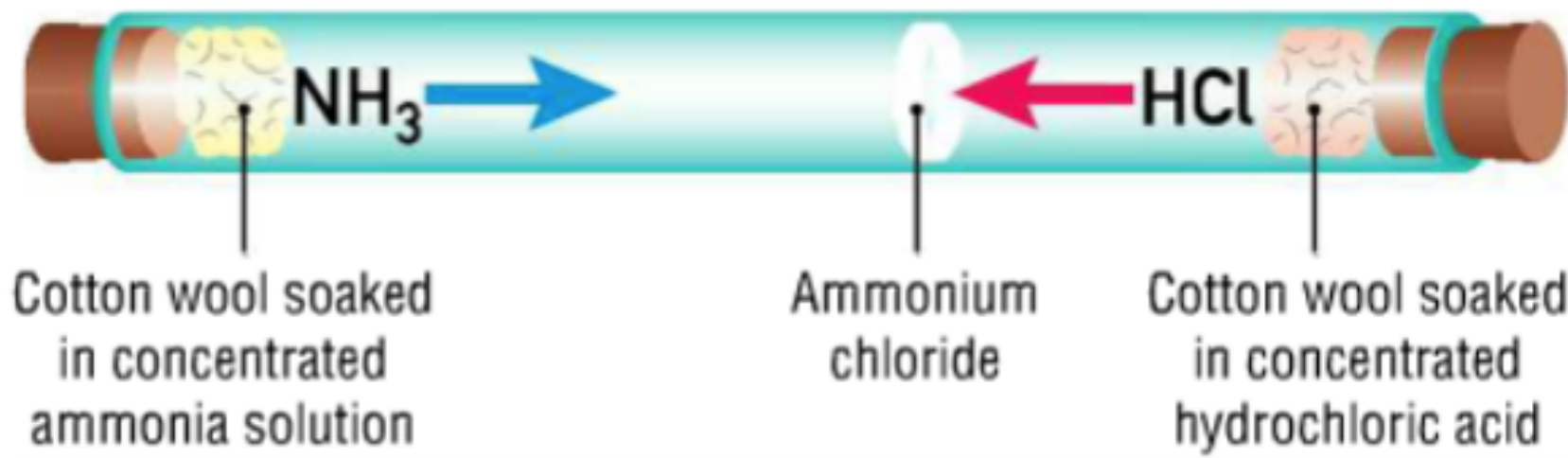
2019 has been designated IYPT
Name the lightest metal.



What is the key factor controlling the opening and closing of stomata?



Which energy conversion is involved in using a microphone?



What is this experiment used to demonstrate?

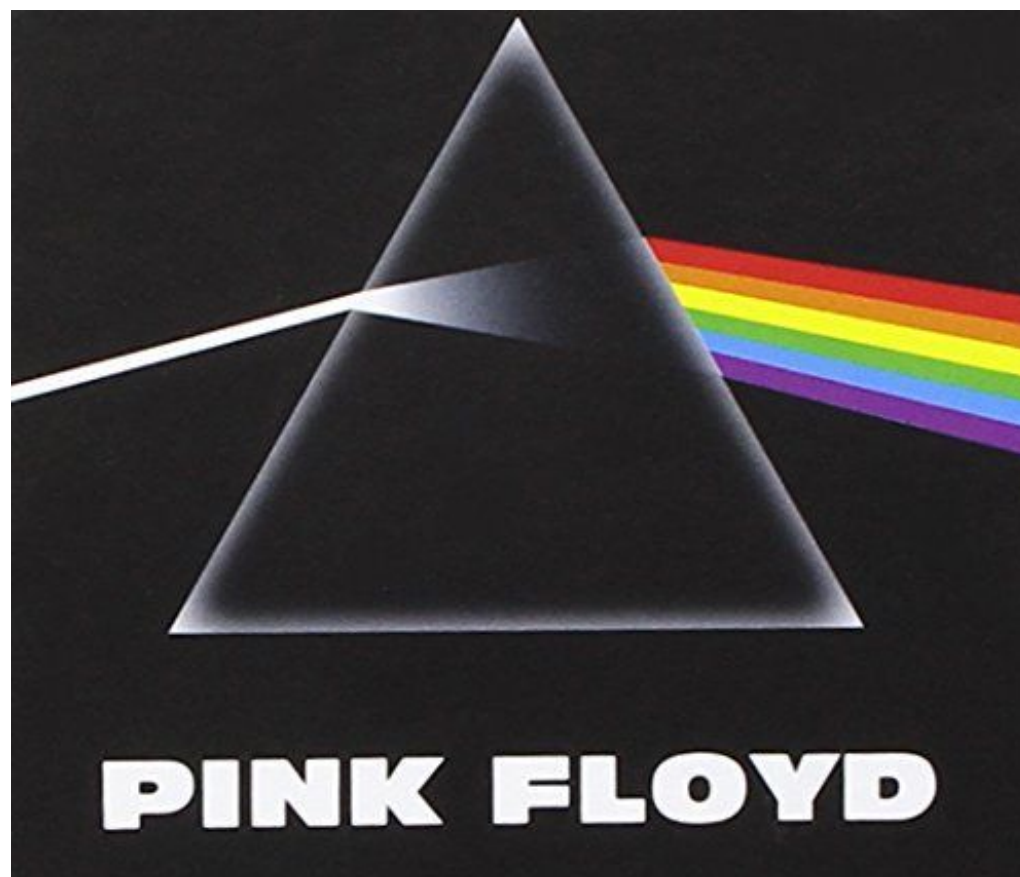


A magnifying glass has what
type of lens?



What grows out of follicles?

Round 2

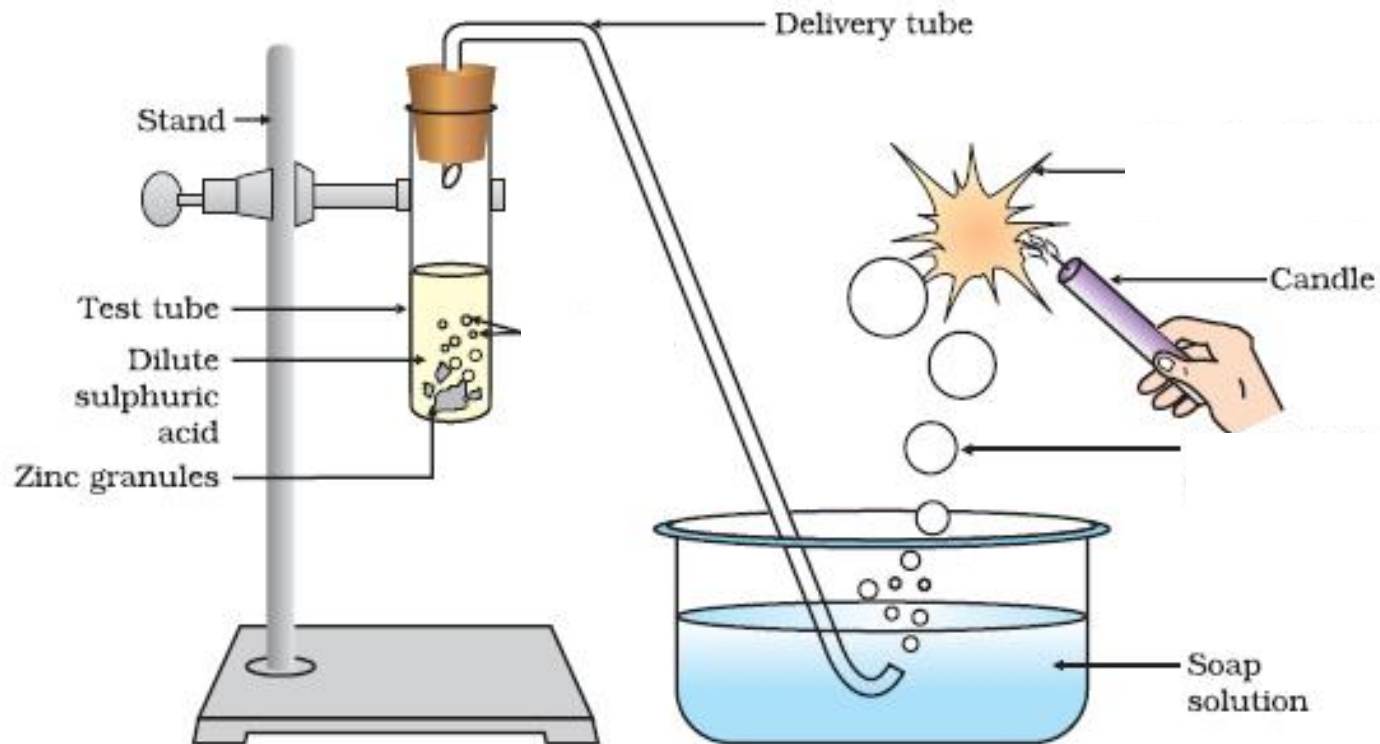


The 'Dark Side of the Moon' album cover by Pink Floyd features which **object** refracting light?

The 'hipster' look remains very popular and the beard is one of its trademarks. Name the **fibrous protein** found in **hair**.



Identify the gas released when dilute sulfuric acid is dropped on zinc granules.





If the power being consumed by an electric fire is 1100 W and the voltage is 220 V, what is the **resistance** of the fire?



Moths are positively **phototactic**.
What does this mean?

The mineral,
haematite, Fe_2O_3
is the main
source of iron in
the steel
industry.

What is the
oxidation state
of iron in Fe_2O_3 ?

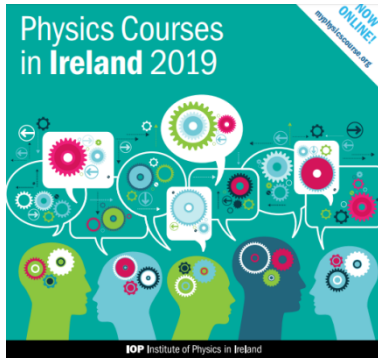


The background of the top section features a cluster of pink hearts of various sizes, some solid and some faded, creating a soft, romantic atmosphere.

WIN Spot Prizes

IOP
Institute of Physics

IOP | Institute of Physics In Ireland



3rd level physics courses booklet and online

Talk to your Physics Teacher about receiving a nomination for this award



Help, support and advise for all teachers of Physics through workshops and by contacting the IOP Teacher Network Coordinators

Check out www.iopireland.org for more information

Round 3

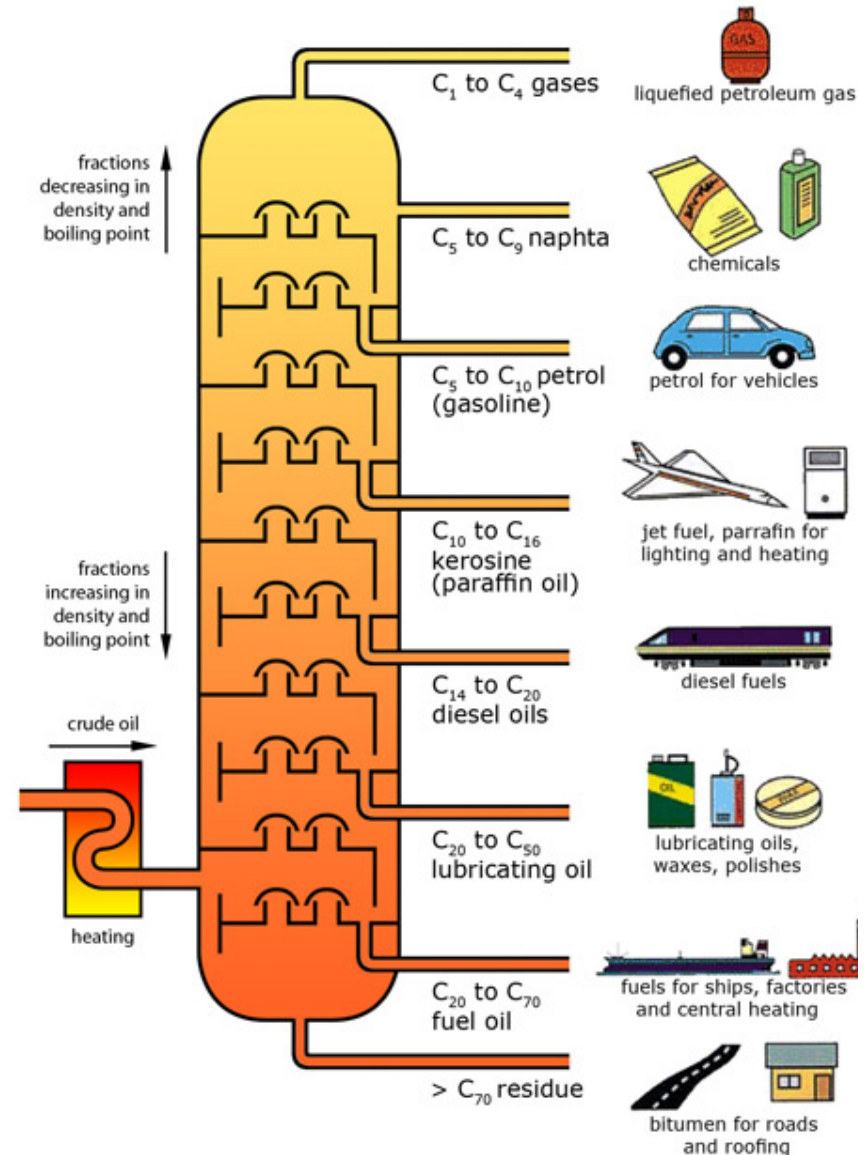
Identify the odd one out

- Amylase
- Bile
- Lipase
- Pepsin



Identify the odd one out

- Bitumen
- Diesel
- Kerosene
- Naphtha



Identify the odd one out

- Abscissic Acid
- Cytokinins
- Gibberellins
- Indoleacetic Acid

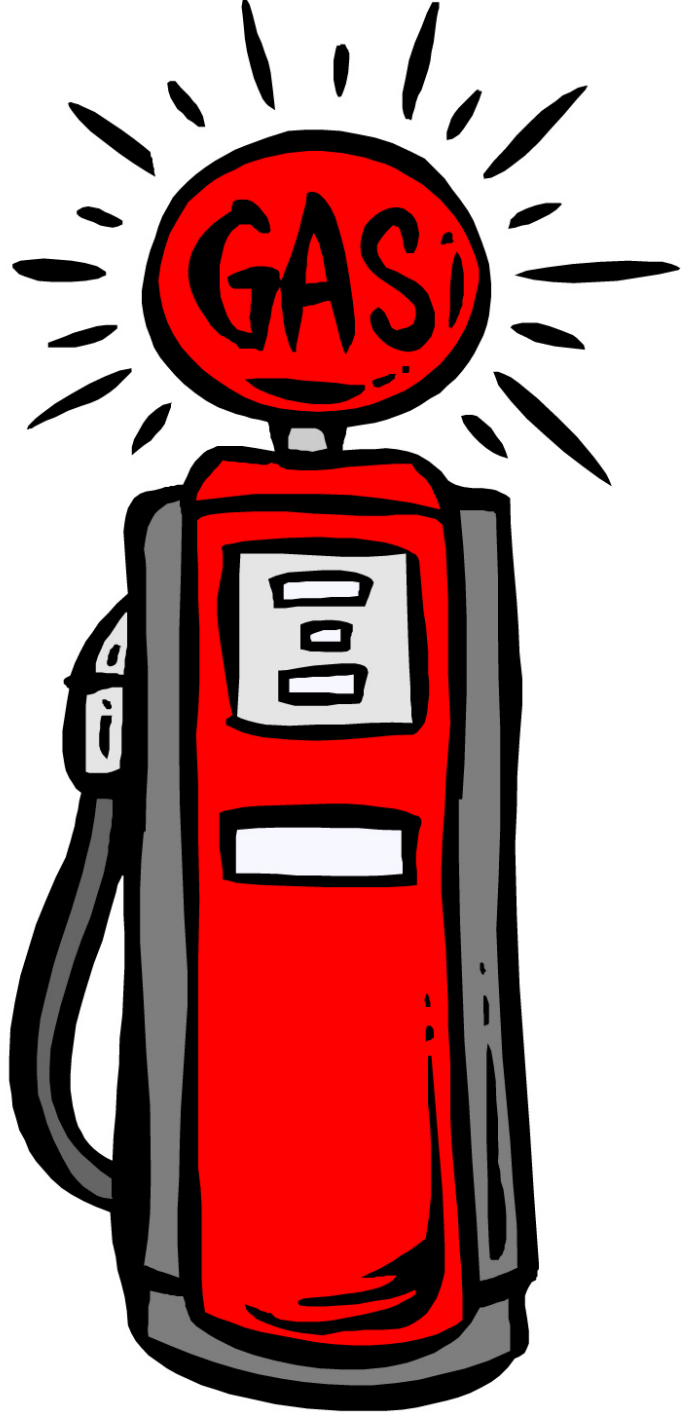


Hormones

Identify the odd one out

- Carpel
- Tarsal
- Radius
- Femur





Identify the odd one out

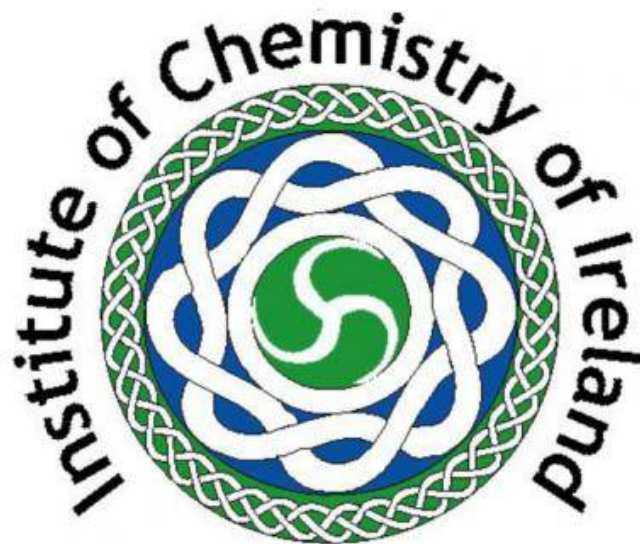
- Fluorine
- Oxygen
- Neon
- Nitrogen

Identify the odd one out

- Celsius
- Degrees
- Fahrenheit
- Kelvin

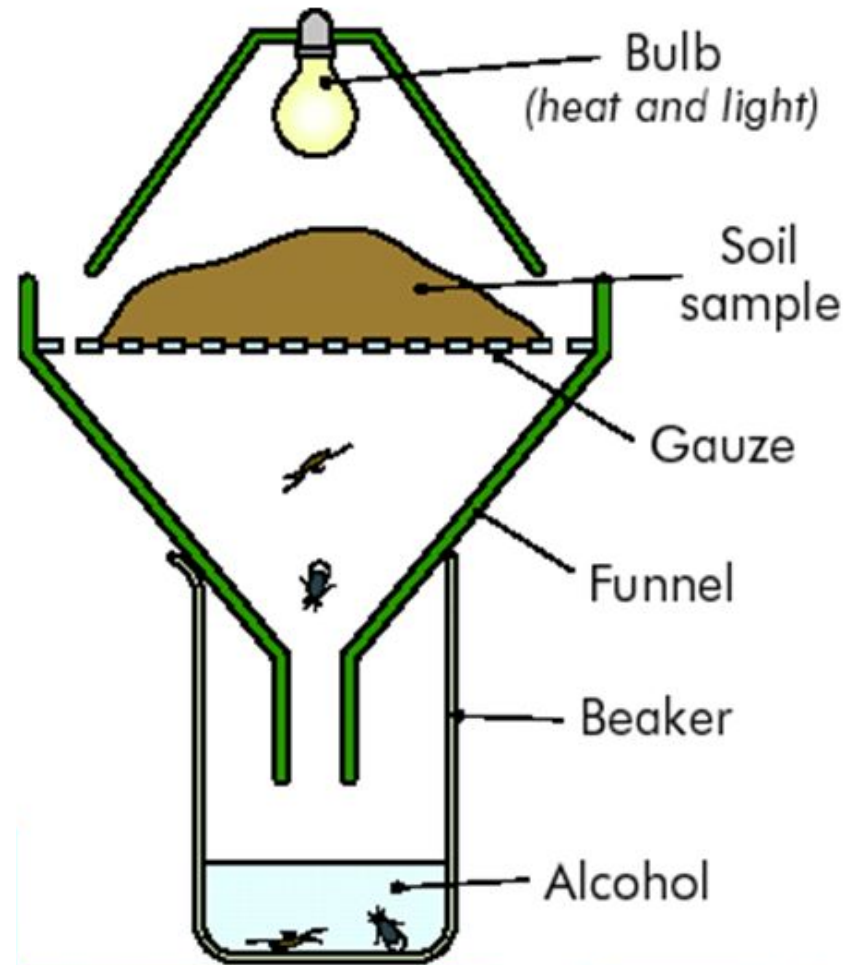


WIN Spot Prizes



Round 4

Identify apparatus



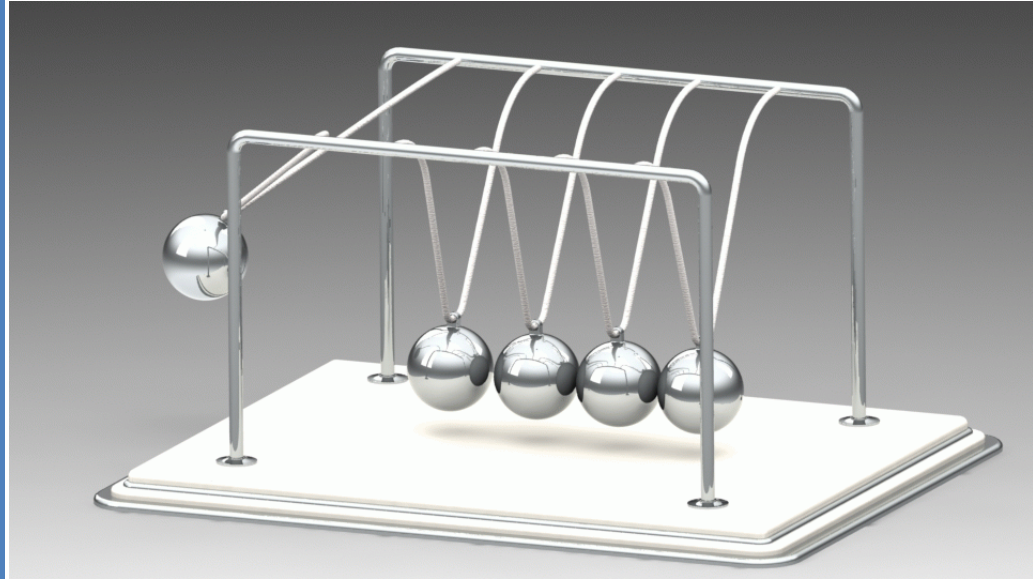
Identify
apparatus



Identify apparatus



Identify
apparatus



Identify apparatus



Identify apparatus



WIN Spot Prizes

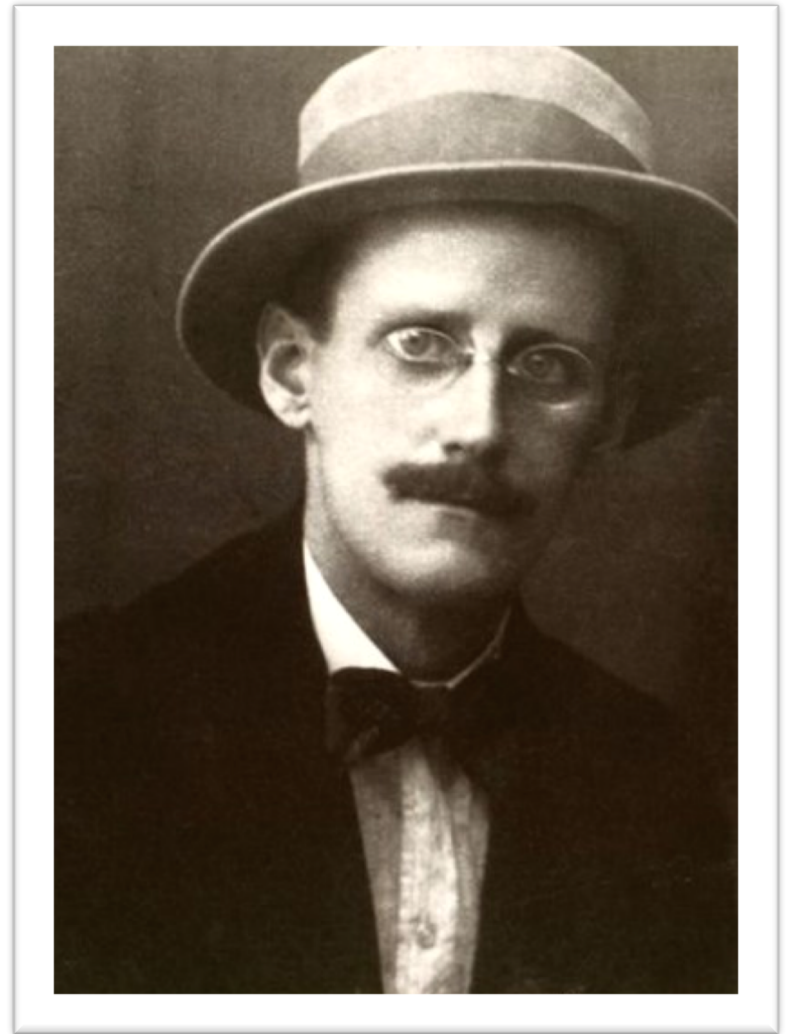


Round 5

Who was the
woman
whose work
on **X-ray
diffraction**
was central
to the
discovery of
DNA?



What famous
Irish writer
thought up
the name
'quark'?



A physicist famous for
his Wave Equation
wrote a well
known book,
'What is Life?' in
Ireland 75 years
ago this year.

Who was he?



Who famously wrote
*“If I have seen a little
further it is by
standing on the
shoulders of
Giants!”*



This French-Polish physicist, the first to win **two Nobel Prizes**, was born 150 years ago.

Who was she?



Who is the
Swedish
naturalist
considered to be
the '*Father of
Taxonomy*'



WIN Spot Prizes



studyclix.ie
makes exams easier

Round 6

Lack of this vitamin
can lead to **spina
bifida** in babies, so
pregnant women
are advised to eat
foods such as
broccoli, liver,
asparagus and
spinach.

Name the vitamin.

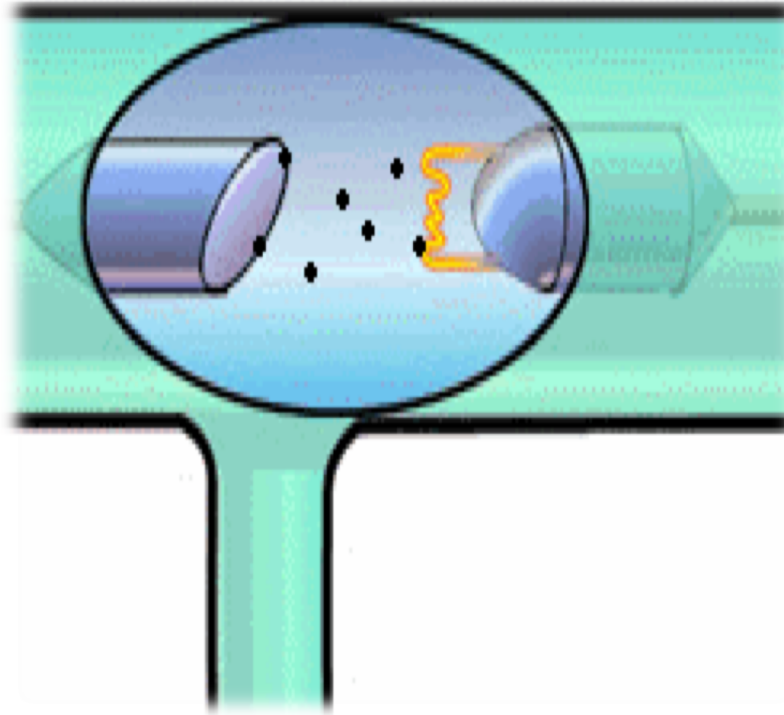


An electric
motor shows
which effect of
an electric
current?



What is the chemical **symbol** for the element **tin**?





What **term** is used to describe the **emission** of electrons from a heated filament?



Farmers often cut hedges to form livestock barriers. What are they trying to prevent by cutting the tips from top?



This **salt** gives a yellow
flame colour and a yellow
precipitate with
ammonium molybdate
and a few drops of **nitric**
acid. Identify it.

WIN Spot Prizes



Congratulations

from Ireland's Leading Educational Publisher

preparing the future...

Round 7

Round 7

Ding!



SAY WHAT



C

First 3 examples!

Say what you see



Guard cell

Say what you see

H-I-J-K-L-M-N-O

H₂O

Say what you see



Antibiotic

Round 6

Ding!

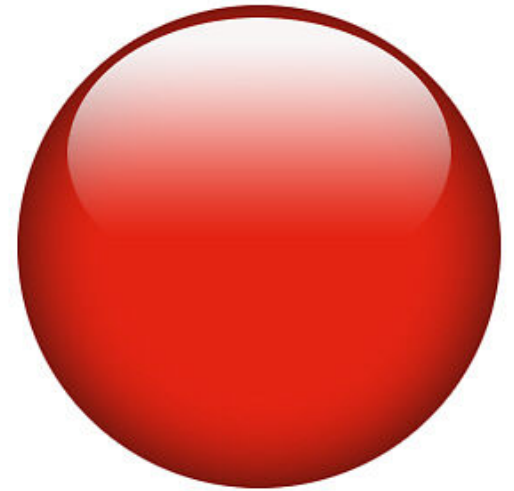
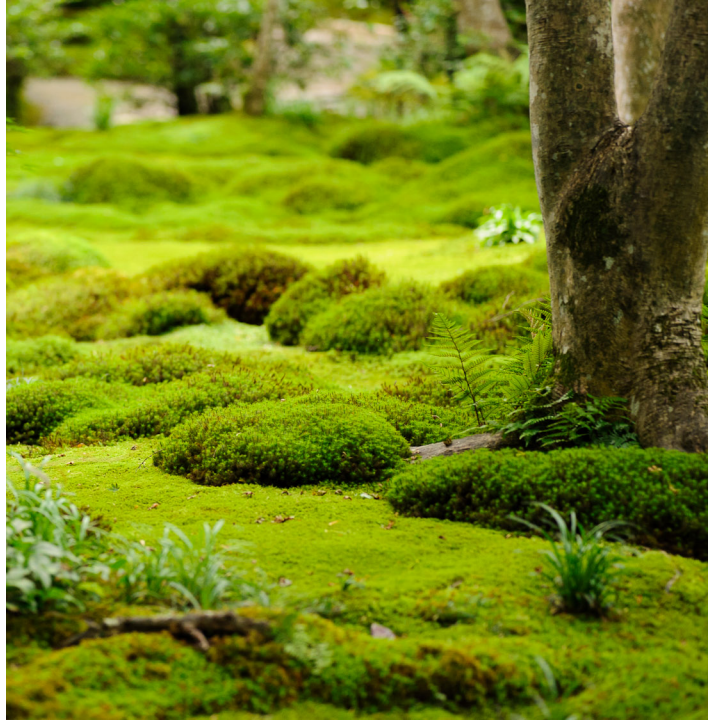


Say what you see



Say what you see

@



Say what you see



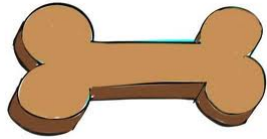
Say what you see

M



~~ters~~s

Say what you see



Say what you see



WIN Spot Prizes

FOLENS



Round 8

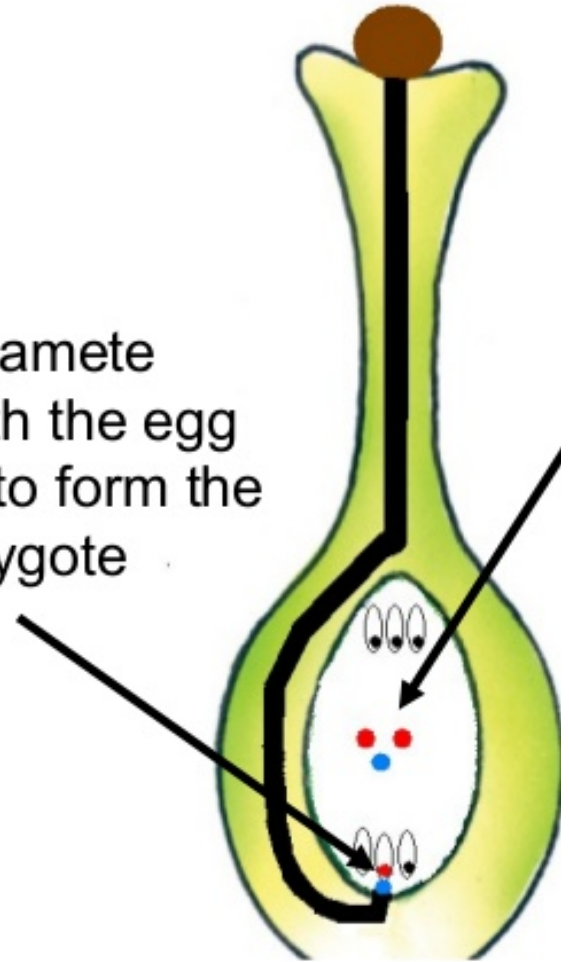
Rice absorbs
moisture and is
added to salt
cellars to stop it
clumping.


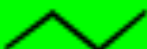

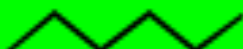
Rice is said to be
H _____







In plants, sexual
reproduction
involves a
double
fertilization
forming a diploid
zygote and what
else?

1 male gamete
fuses with the egg
nucleus to form the
diploid zygote



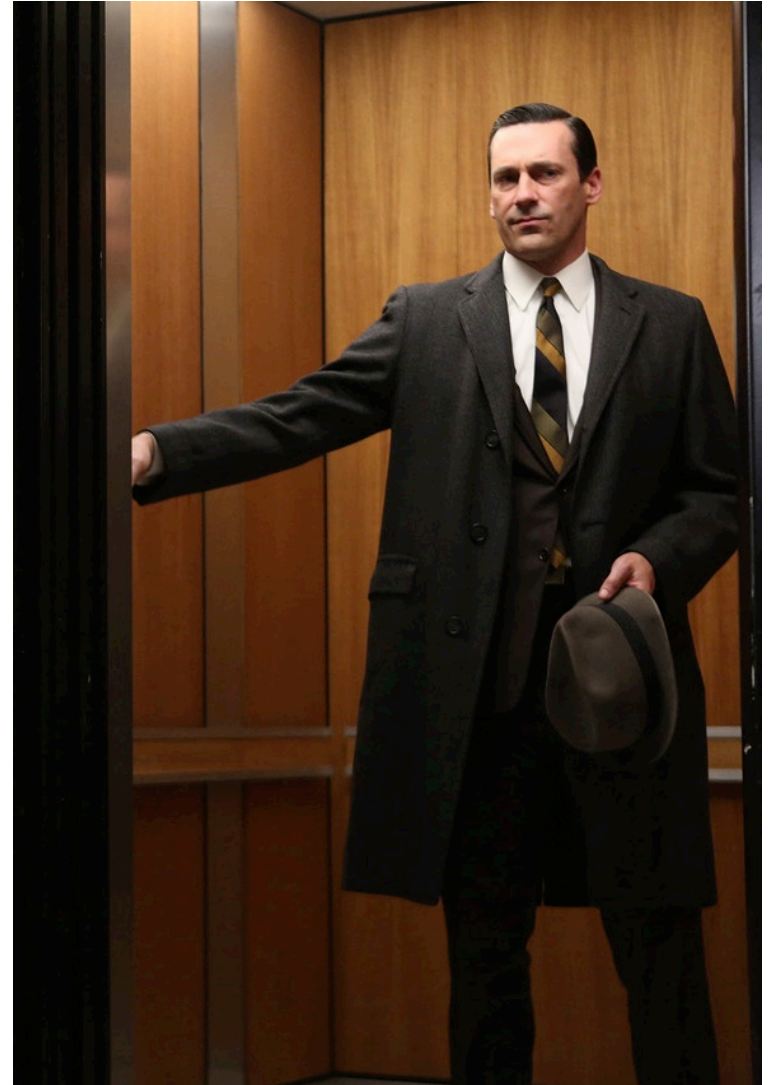
ALKANES				
Boiling point	-42 °C	0 °C	36 °C	69 °C

ALCOHOLS				
Boiling point	97 °C	117 °C	138 °C	158 °C

Why is the boiling point of alcohols higher than alkanes of similar molecular mass?

An elevator lifts a weight of **2000 N** through a height of **10 m** in **5 s**.

What is the **power** of the elevator?



This effect is commonly heard when a vehicle sounding a siren approaches, passes and recedes from an observer.

What is the effect called?



What is the
chemical name
or chemical
formula for
laughing gas?



Thank You!

