SECONDE

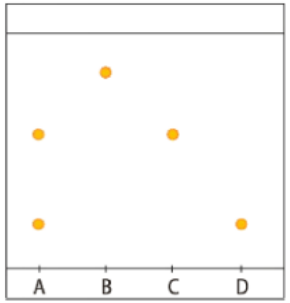
Le programme de Physique-Chimie de la classe de seconde vise à faire pratiquer les méthodes et démarches de physique et de chimie en mettant particulièrement en avant la pratique expérimentale et l'activité de modélisation.

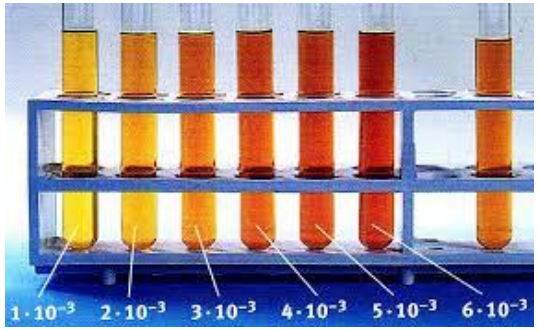
L'objectif est de donner aux élèves une vision intéressante et authentique de la Physique-Chimie.

CONSTITUTION ET TRANSFORMATIONS DE LA MATIERE

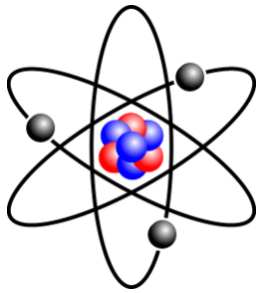
1. Constitution de la matière de l'échelle macroscopique à l'échelle microscopique

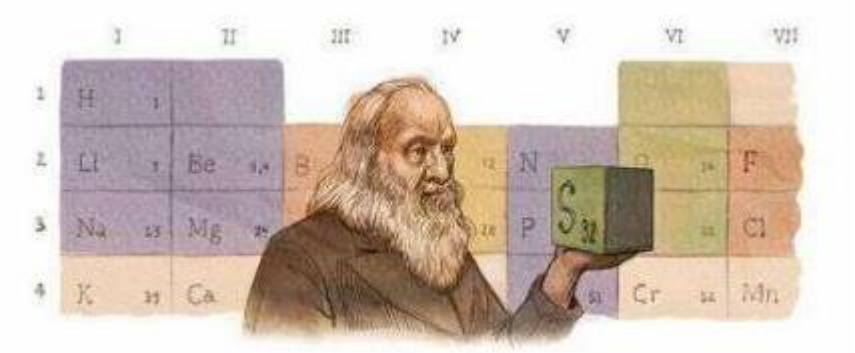
DESCRIPTION ET CARACTERISATION DE LA MATIERE A L'ECHELLE MACROSCOPIQUE

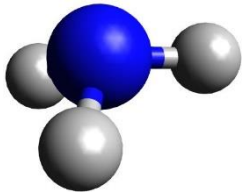


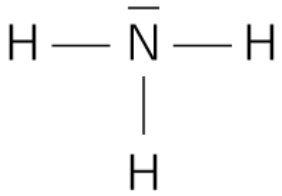


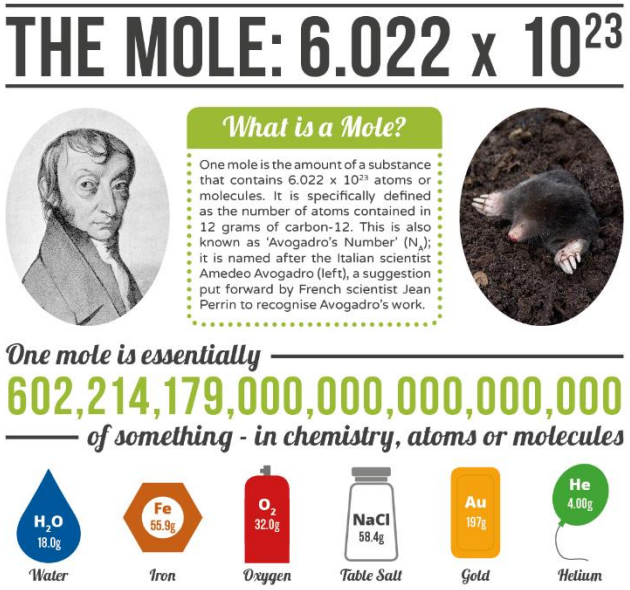
MODELISATION DE LA MATIERE A L'ECHELLE MICROSCOPIQUE





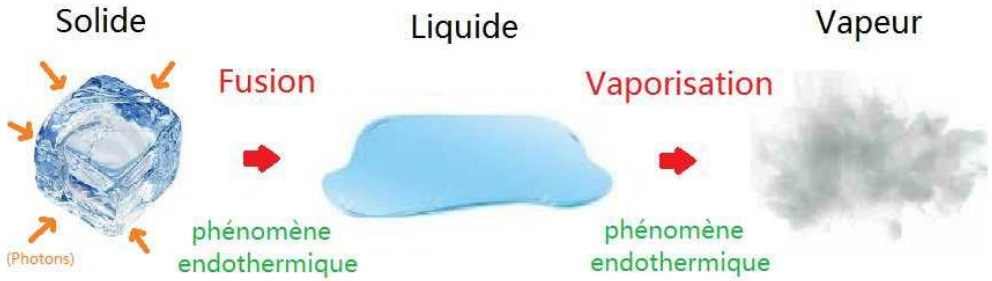


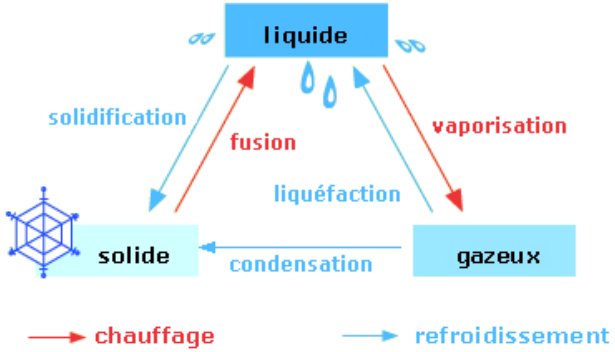




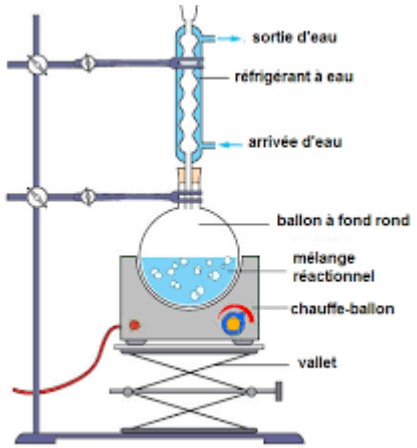
2. Modélisation des transformations de la matière et transfert d'énergie

TRANSFORMATION PHYSIQUE

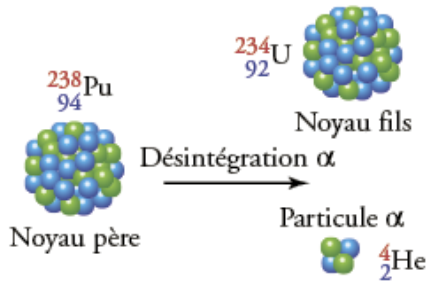


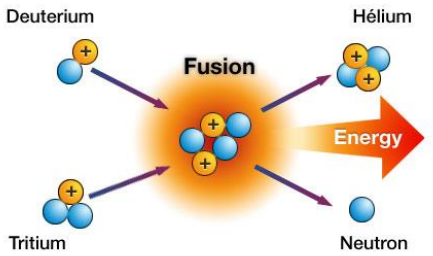


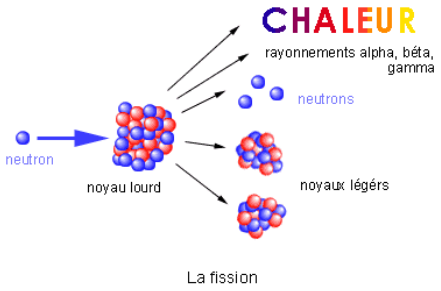
TRANSFORMATION CHIMIQUE



TRANSFORMATION NUCLEAIRE

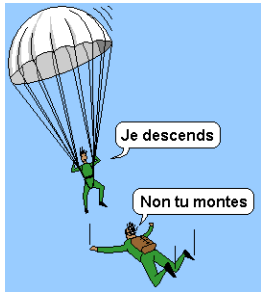




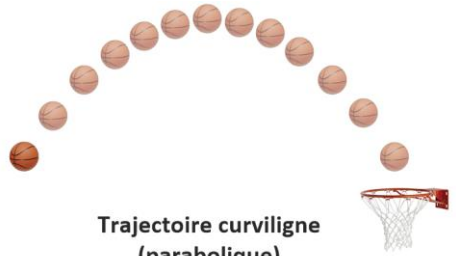


MOUVEMENT ET INTERACTIONS

1. Décrire un mouvement



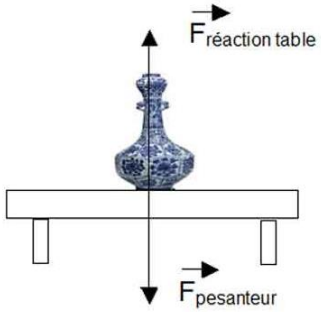
Trajectoire rectiligne



Trajectoire curviligne
(parabolique)

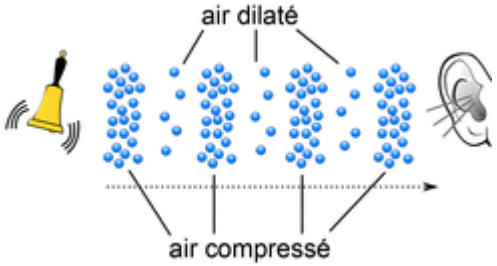
2. Modéliser une action sur un système

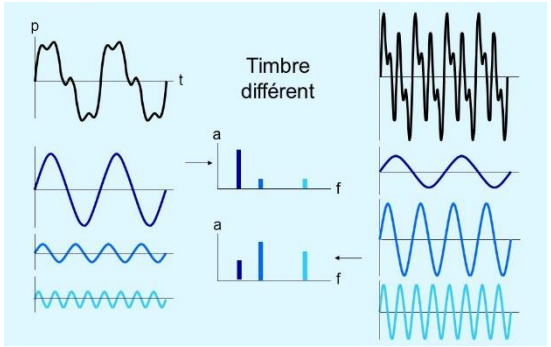
3. Principe d'inertie

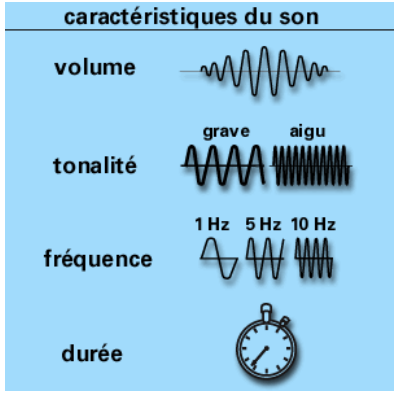


ONDES ET SIGNAUX

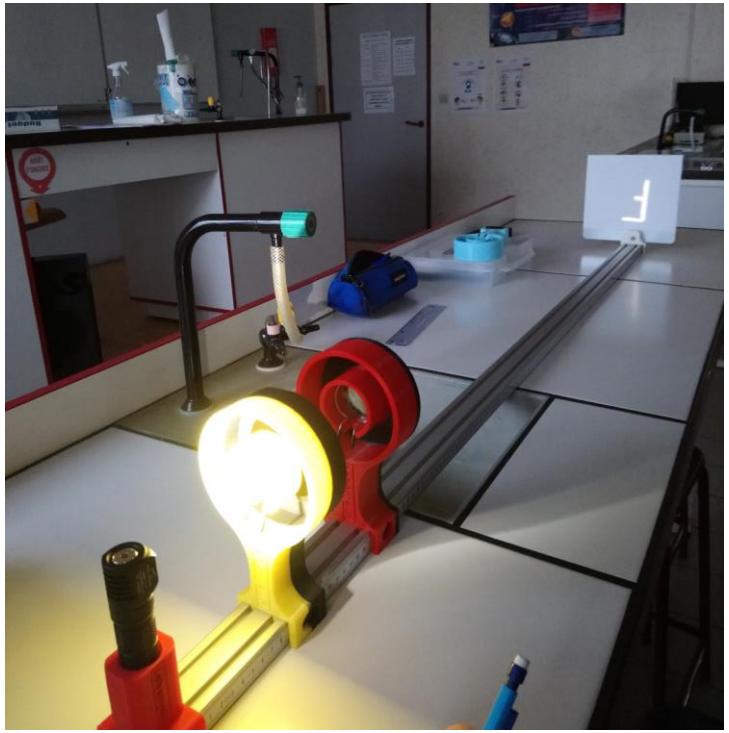
1. Émission et perception d'un son

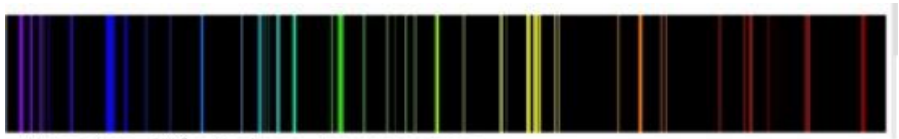




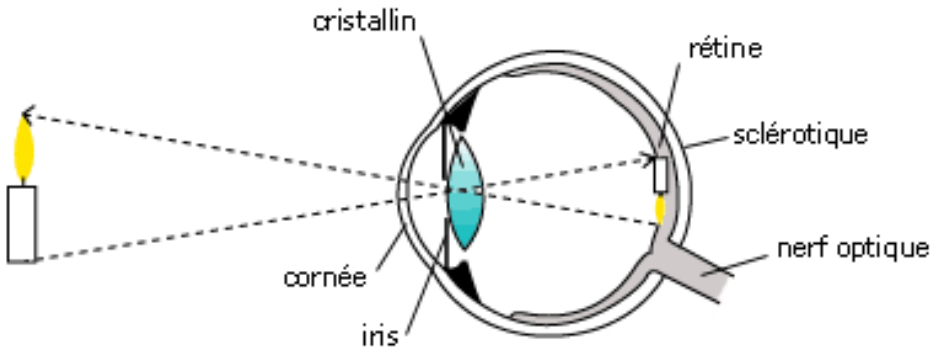


2. Vision et image

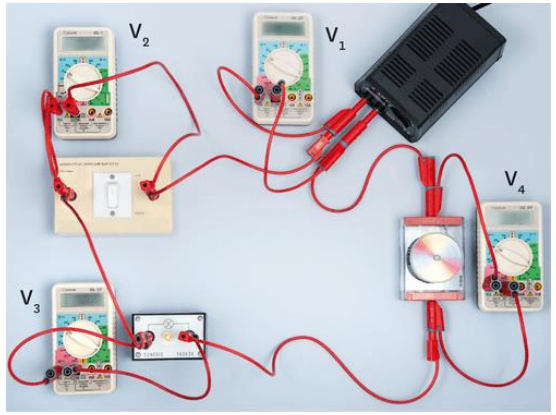


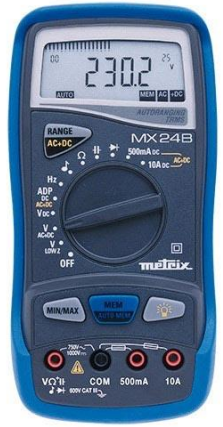


Spectre d'émission du mercure



3. Signaux et capteurs

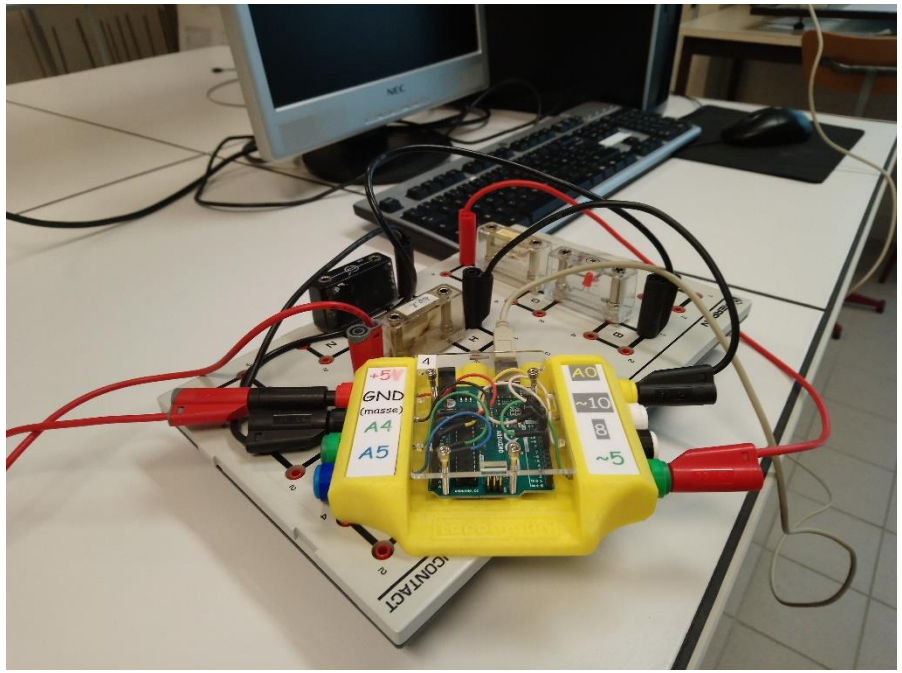





```
int val = A0;
int LDR = A0;
int led = 5;

void setup() {
 Serial.begin(9600);
pinMode(led, OUTPUT);
}

void loop() {
  val = analogRead(LDR);
  Serial.println(val);
   if (val>500){digitalWrite (led, HIGH);
                delay (100);
                digitalWrite(led, LOW);
                delay (200);}
}
```



EXPERIENCES DE PHYSIQUE AU LYCEE