



# Dr Zakiah Abd Halim

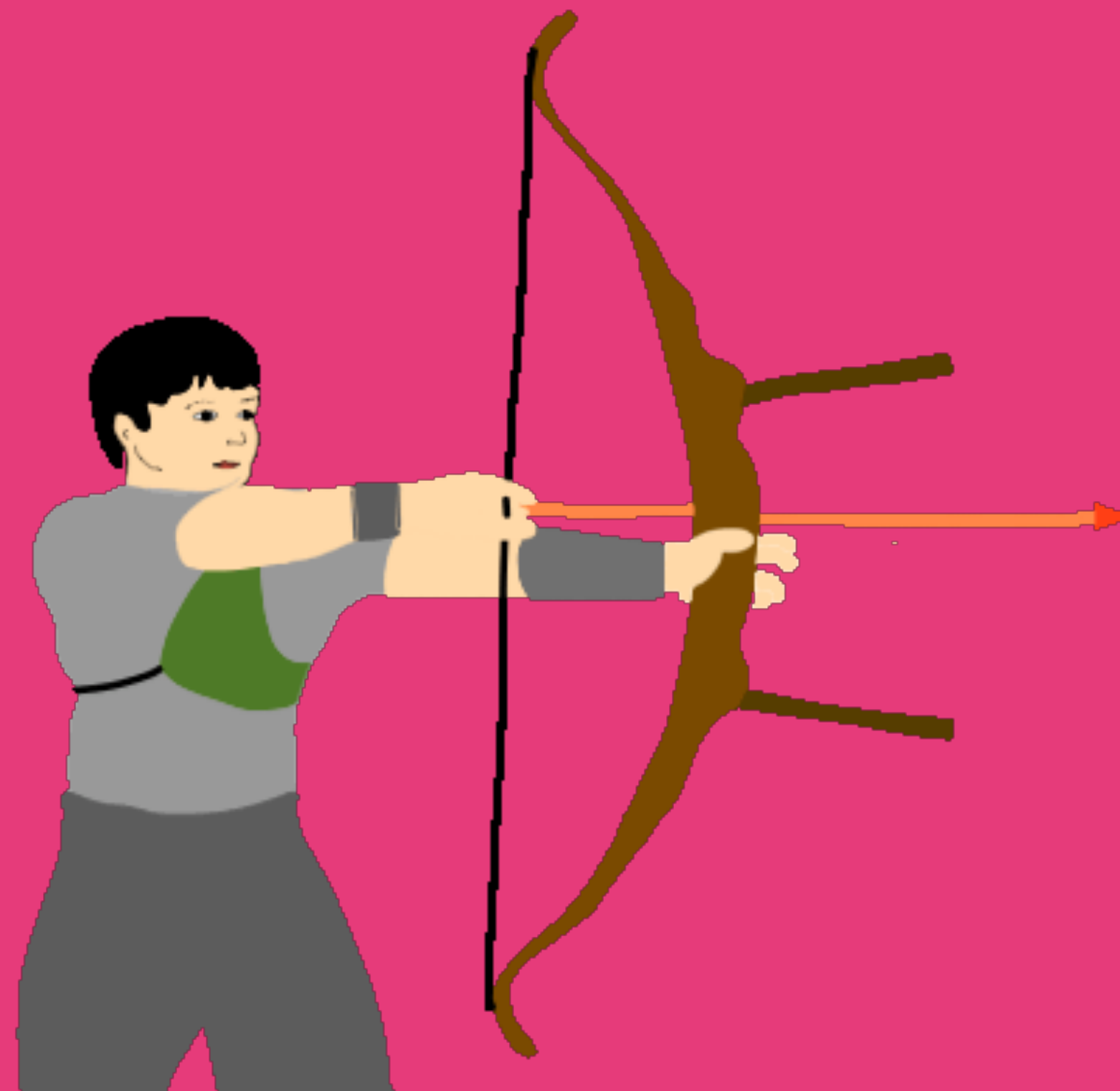
*Fakulti Kejuruteraan Mekanikal*

*Non-Destructive Testing & Structural Health Integrity*



# Lesson Outcome

Animated Engineering GIFs in education



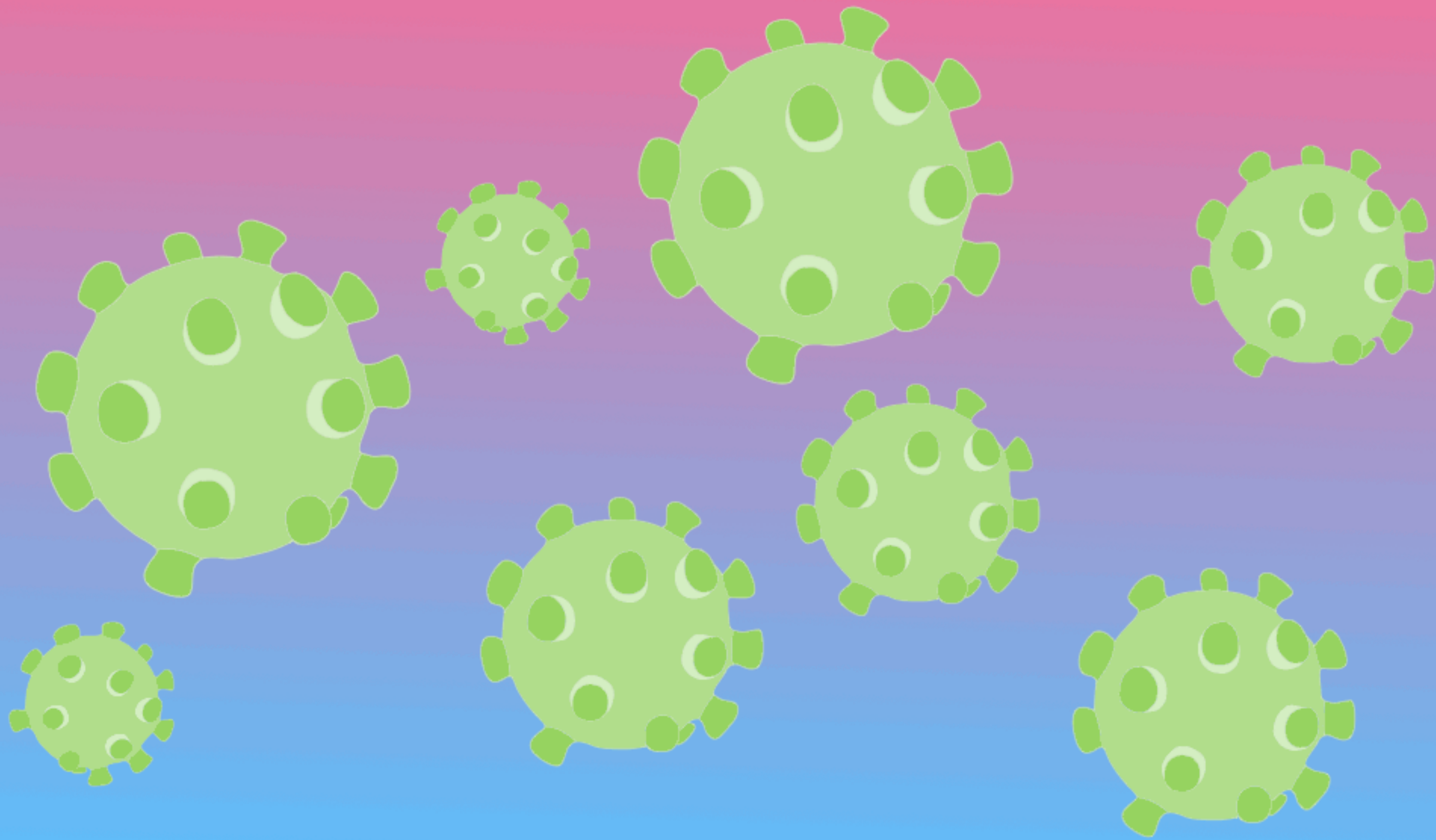


# Outline



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- ★ **Why GIFs?**
  - ★ **Examples**
  - ★ **Create Animated GIFs**
    - 1. Text
    - 2. Shape and animation
    - 3. Animation cycle
  - ★ **Create Content using Animated GIFs**

**What is GIFs?**





**Why GIFs?**

**Which one is more effective?**

**A**



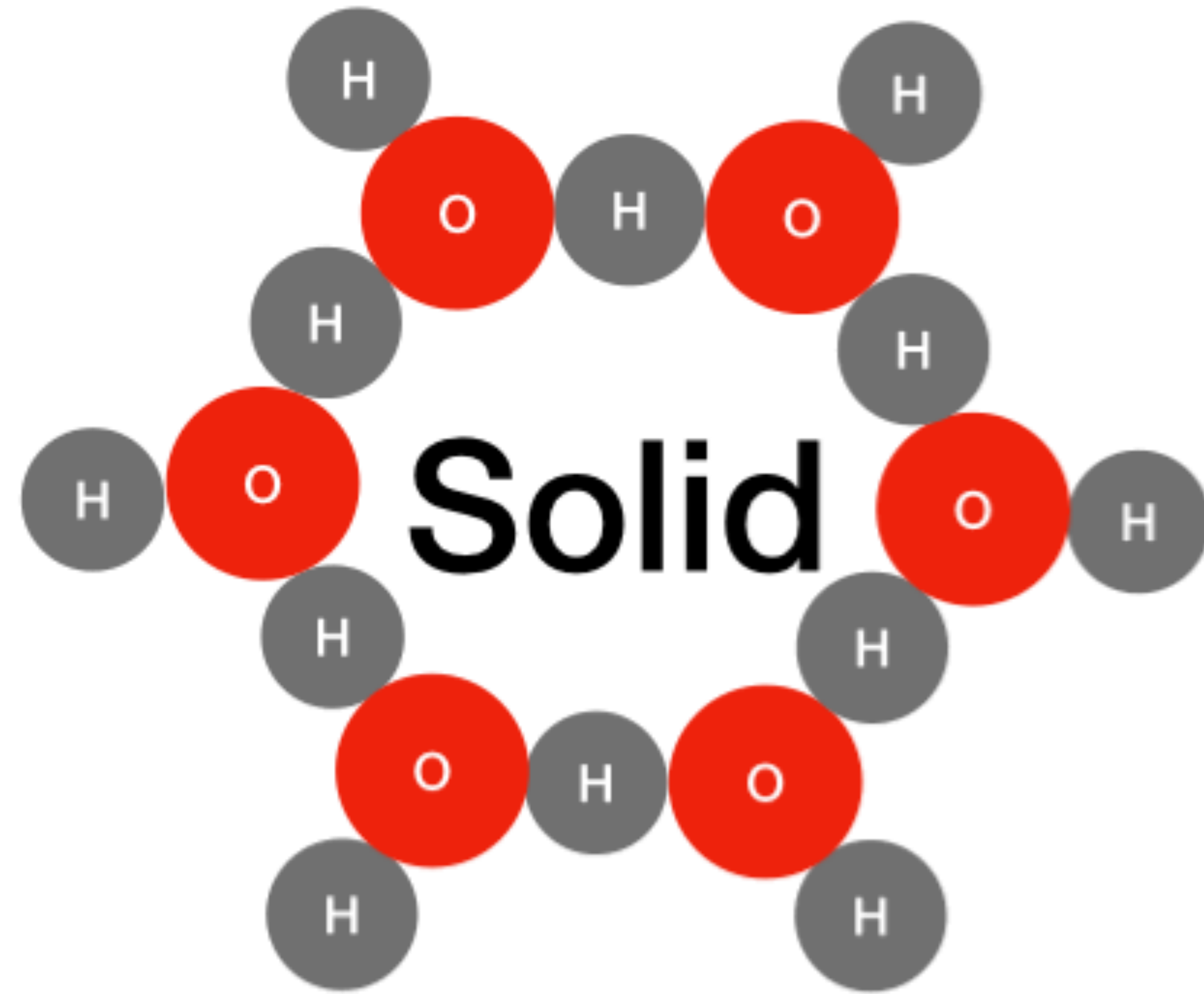
**B**

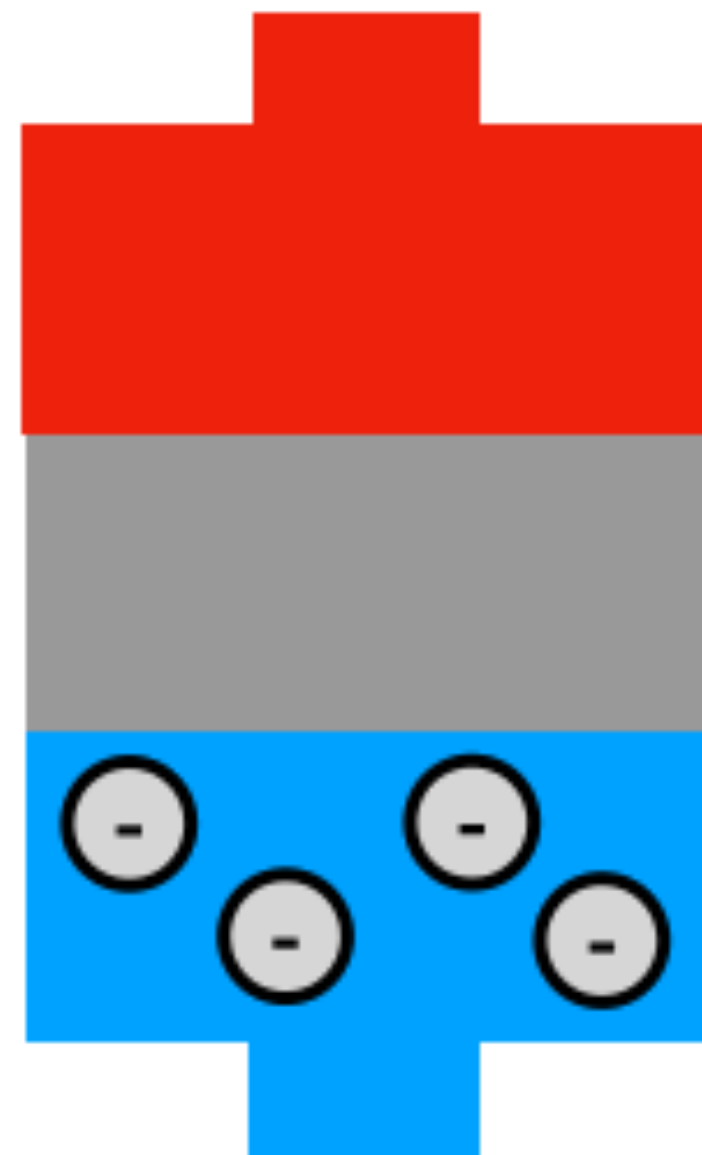




**Examples**

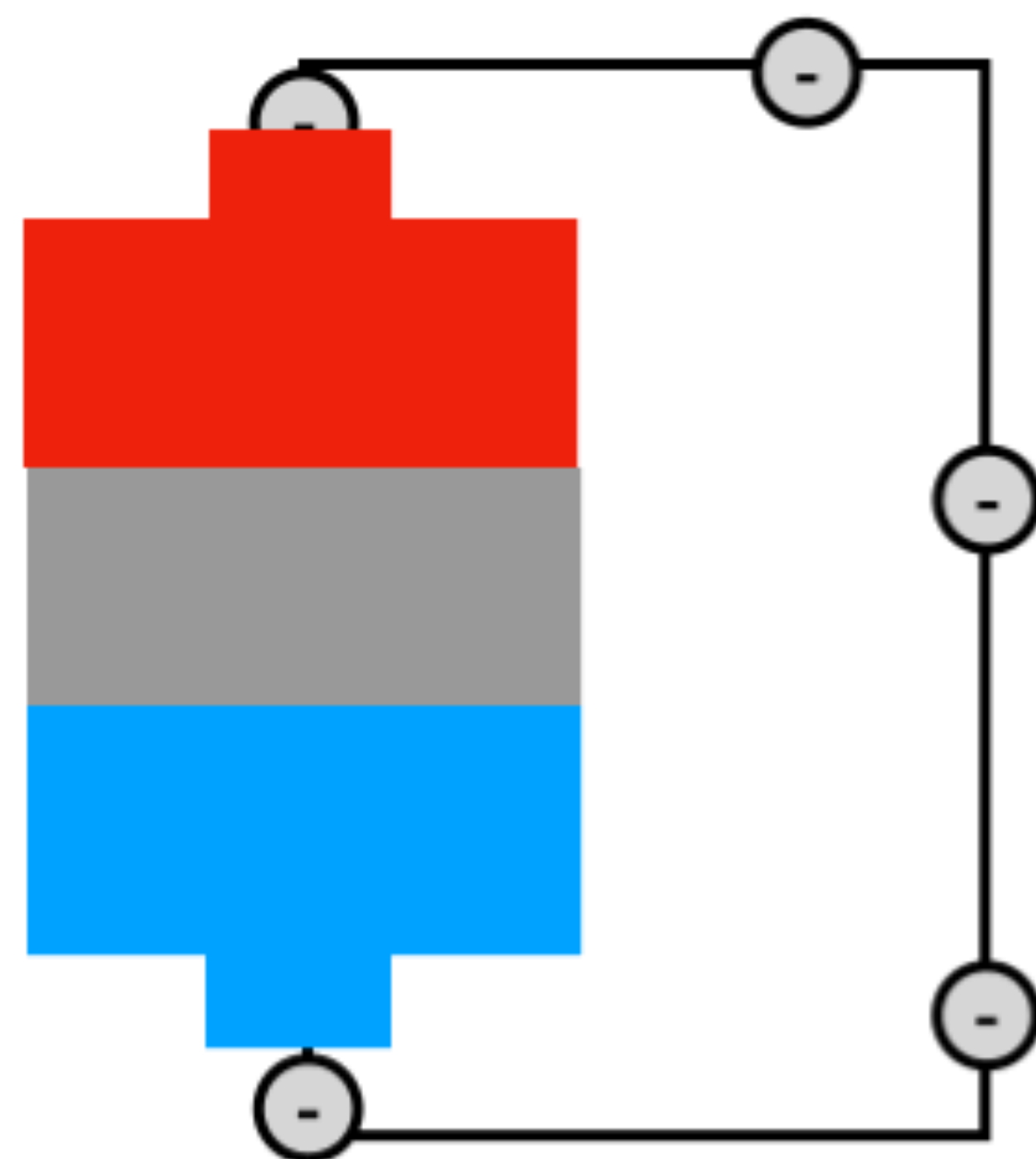
Engineering GIF

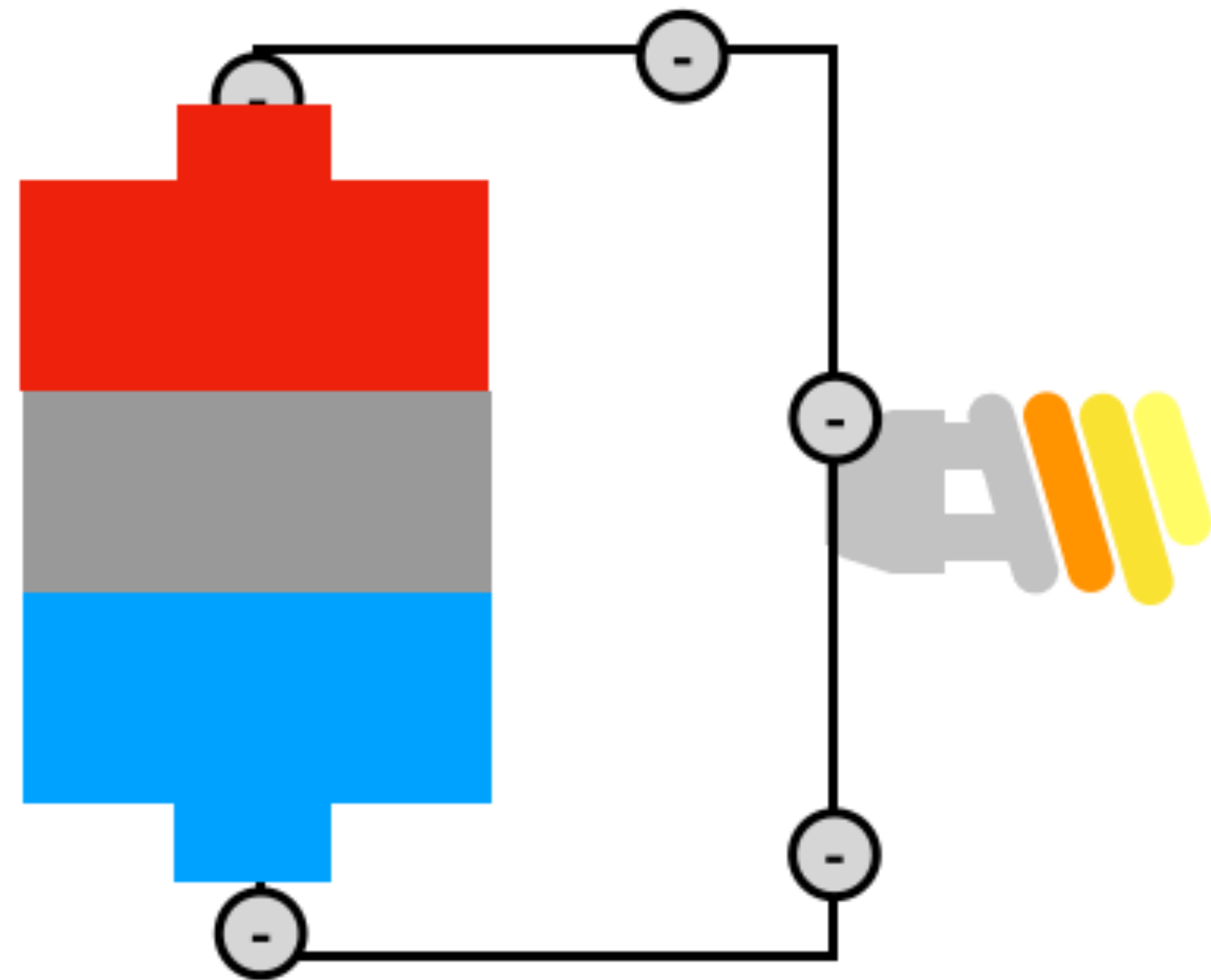




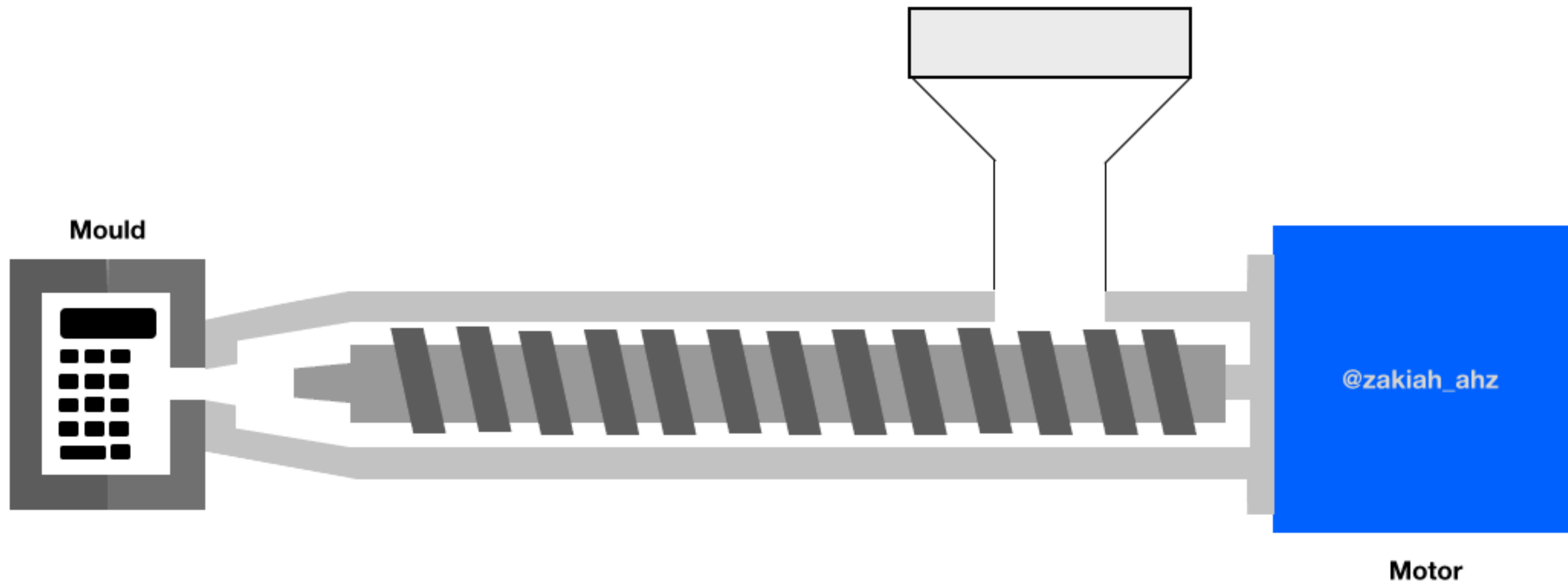




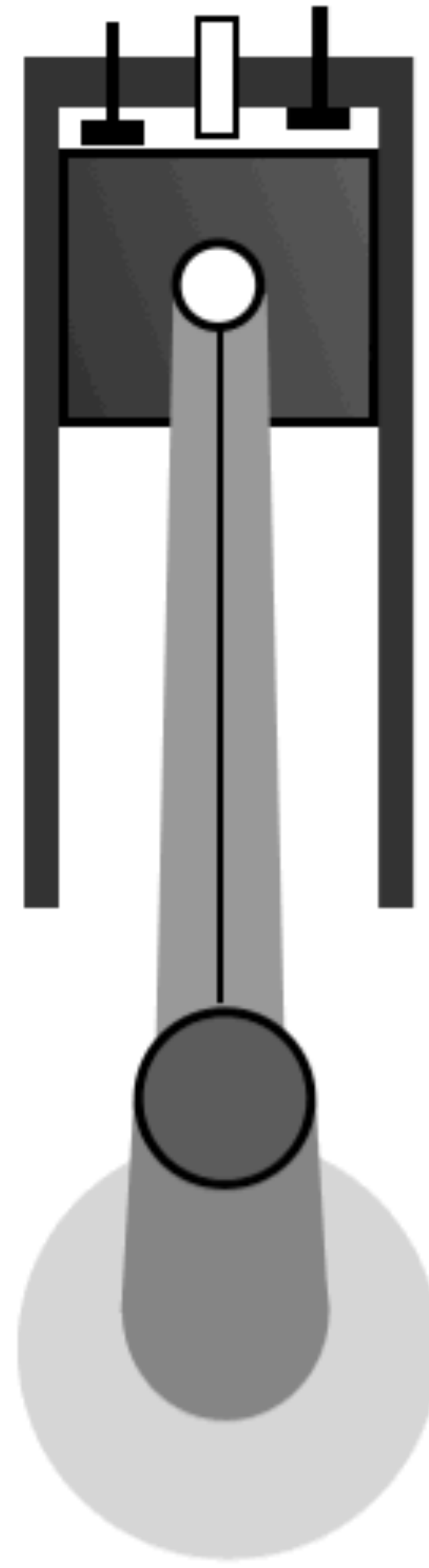














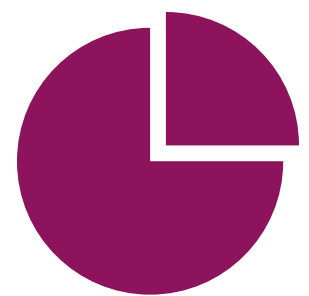
## INTERACTIVE

Fun learning and  
engaging



## ENGAGING

Dynamics to convey  
information, emotion  
and idea



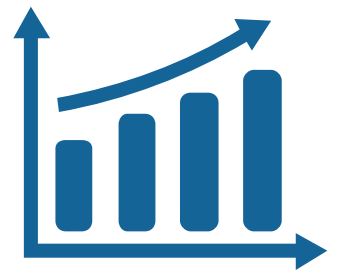
## SMALL SIZE

No audio, only motion



## EFFECTIVE

Visualise ideas



## EFFICIENT

Convey messages  
better to facilitate  
learning



# Examples

Development of  
Learning Content

**Science**

*Forces*





**Animated GIF**

*Text*







**Animated GIF**

*Shape + Animation*

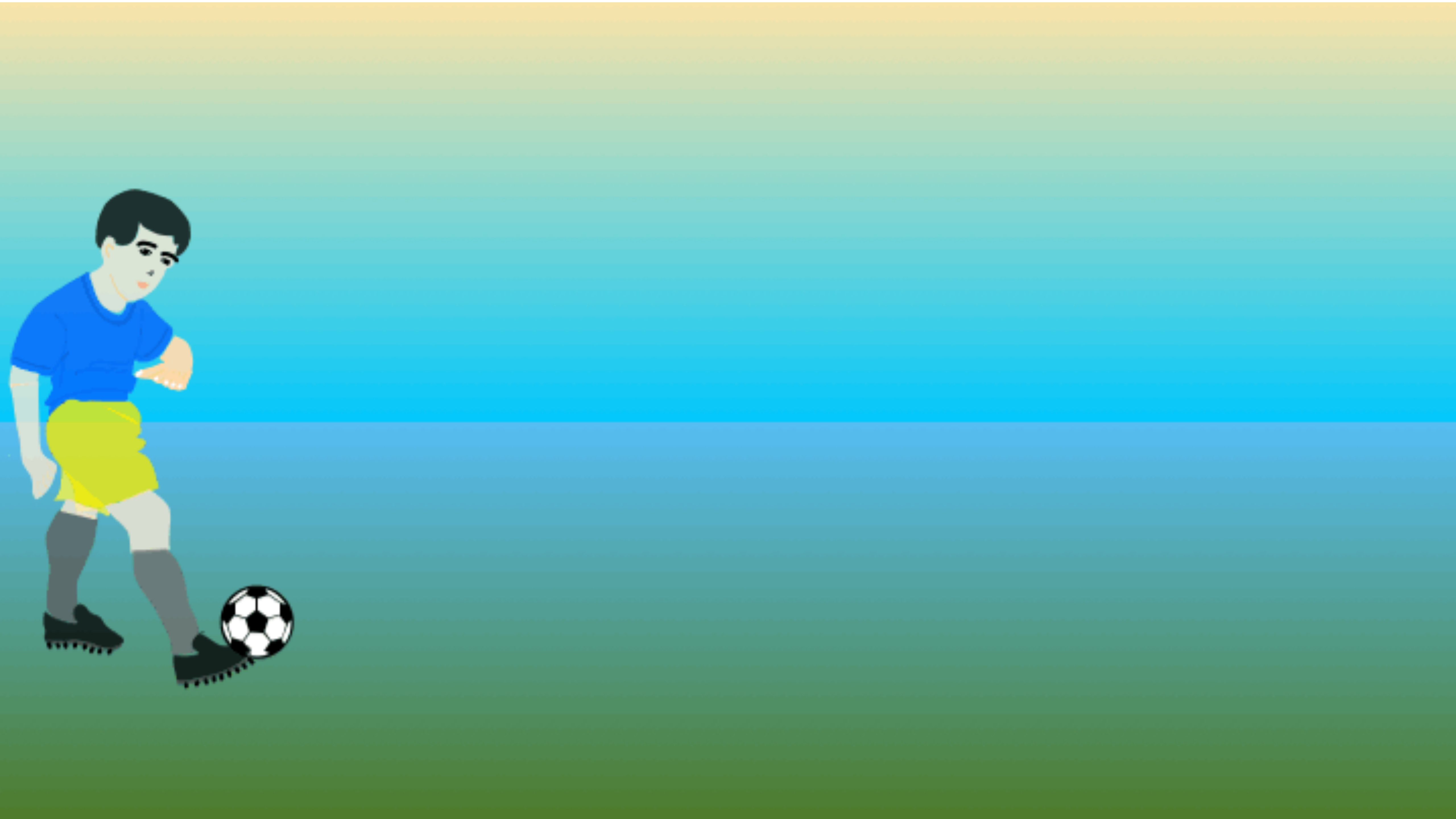
Kesan



**Animated GIF**

*Animation cycle*



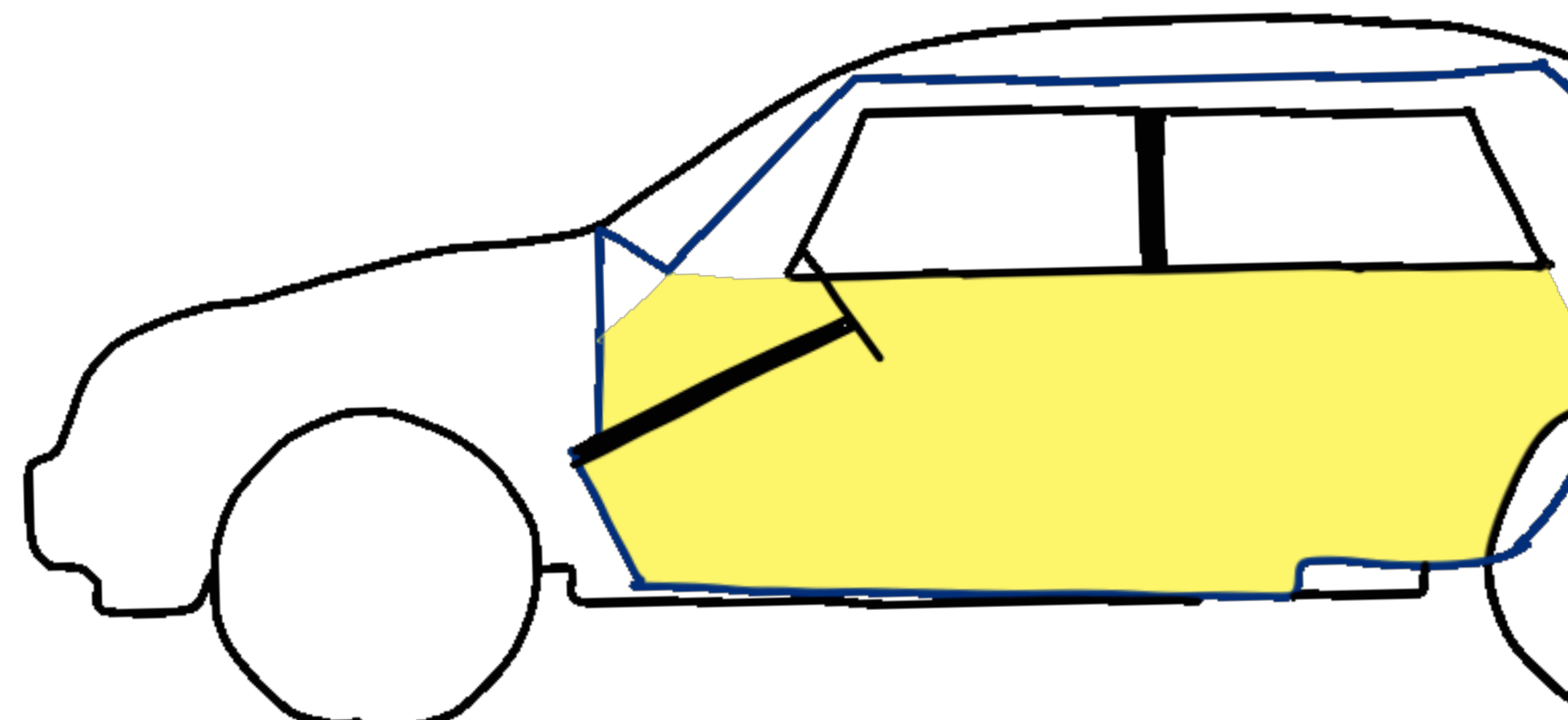
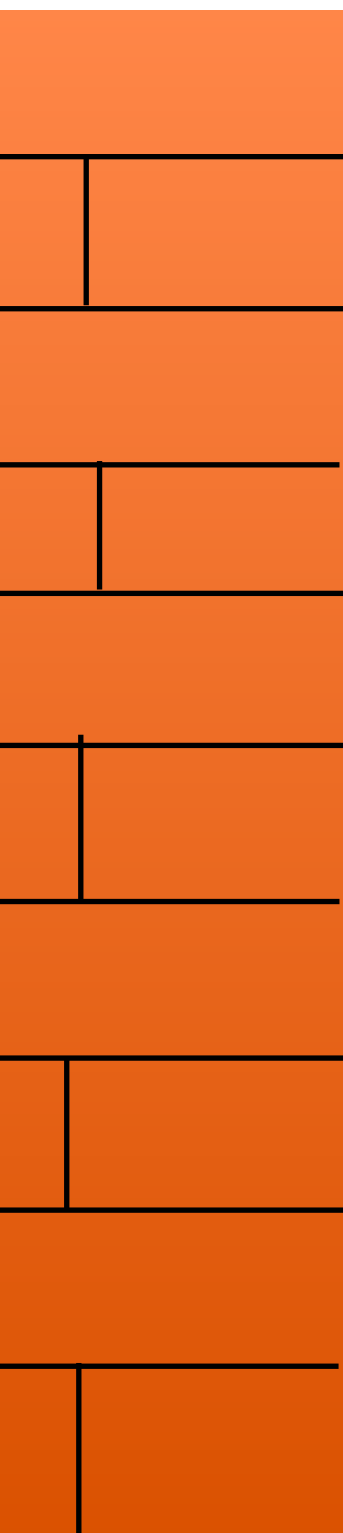


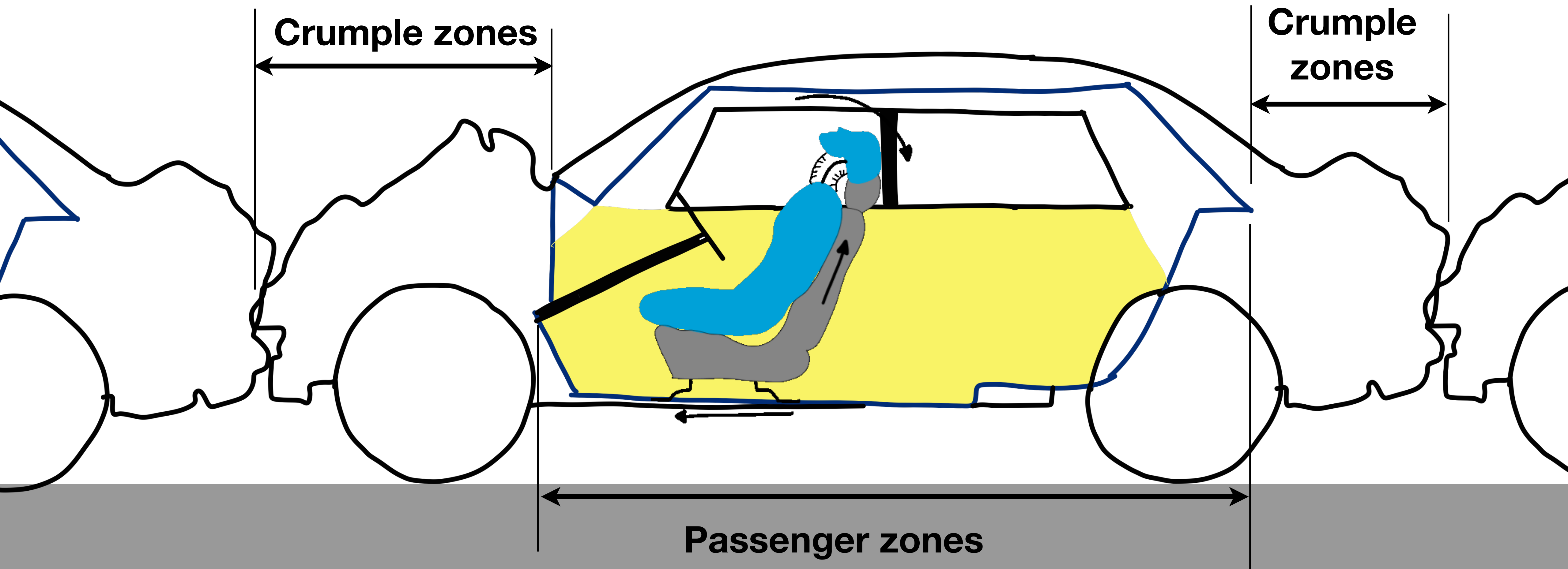
**Dynamics**

*car crash*



# CRUMPLE ZONES





**How to**  
step-by-step

Kesan

Daya



**Animated GIF**

*Create Content*

# Step 1: Pre-cleaning







# STRAIGHT BEAM TRANSDUCER

IP

BW1

Range

100

Velocity

5920

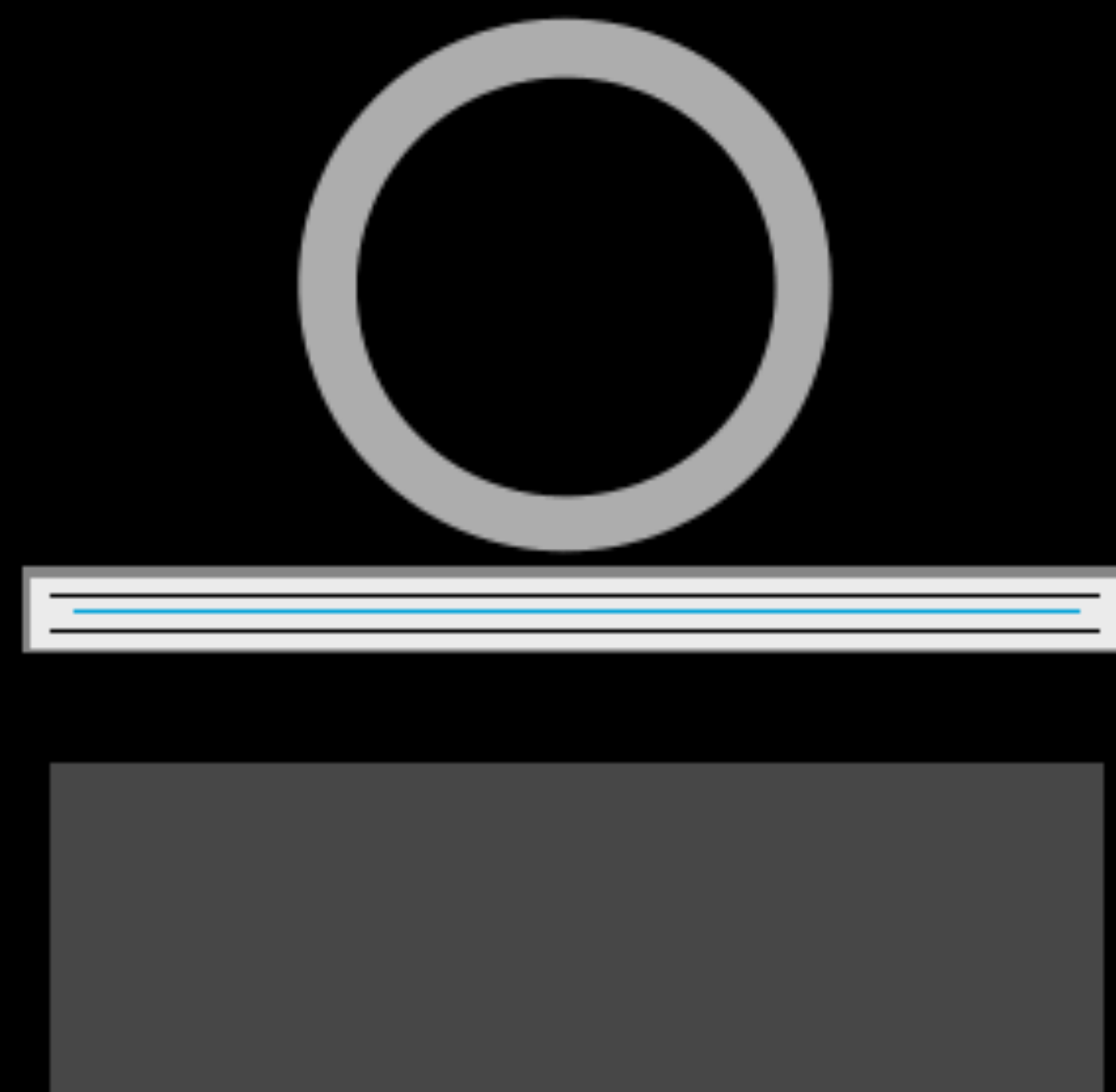
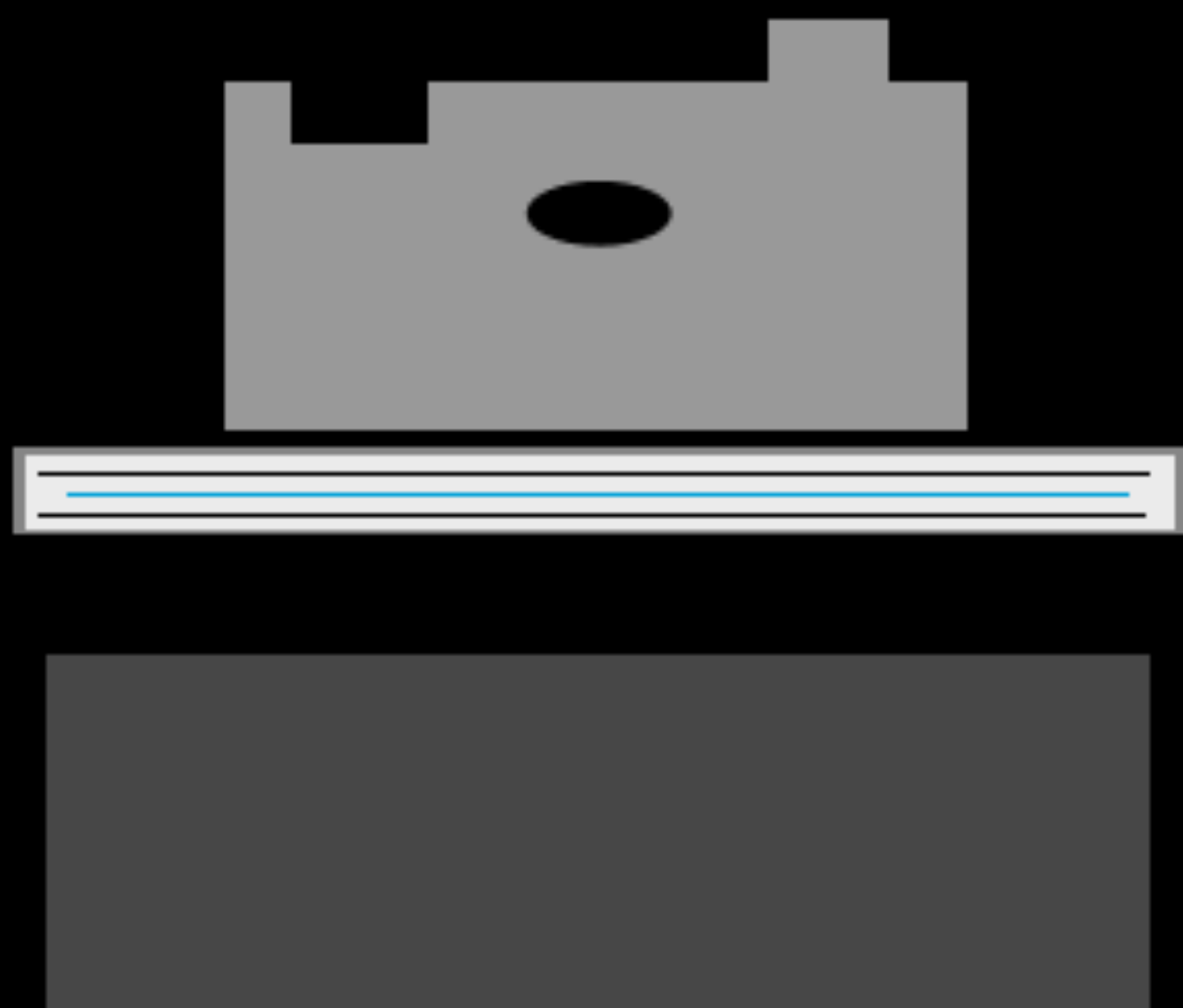
D-delay

0.1295

P-delay

0.0124

100 mm



# STRAIGHT BEAM TRANSDUCER

IP

BW1

Range

100

Velocity

5920

D-delay

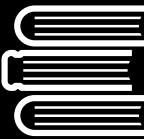
0.1295

P-delay

0.0124

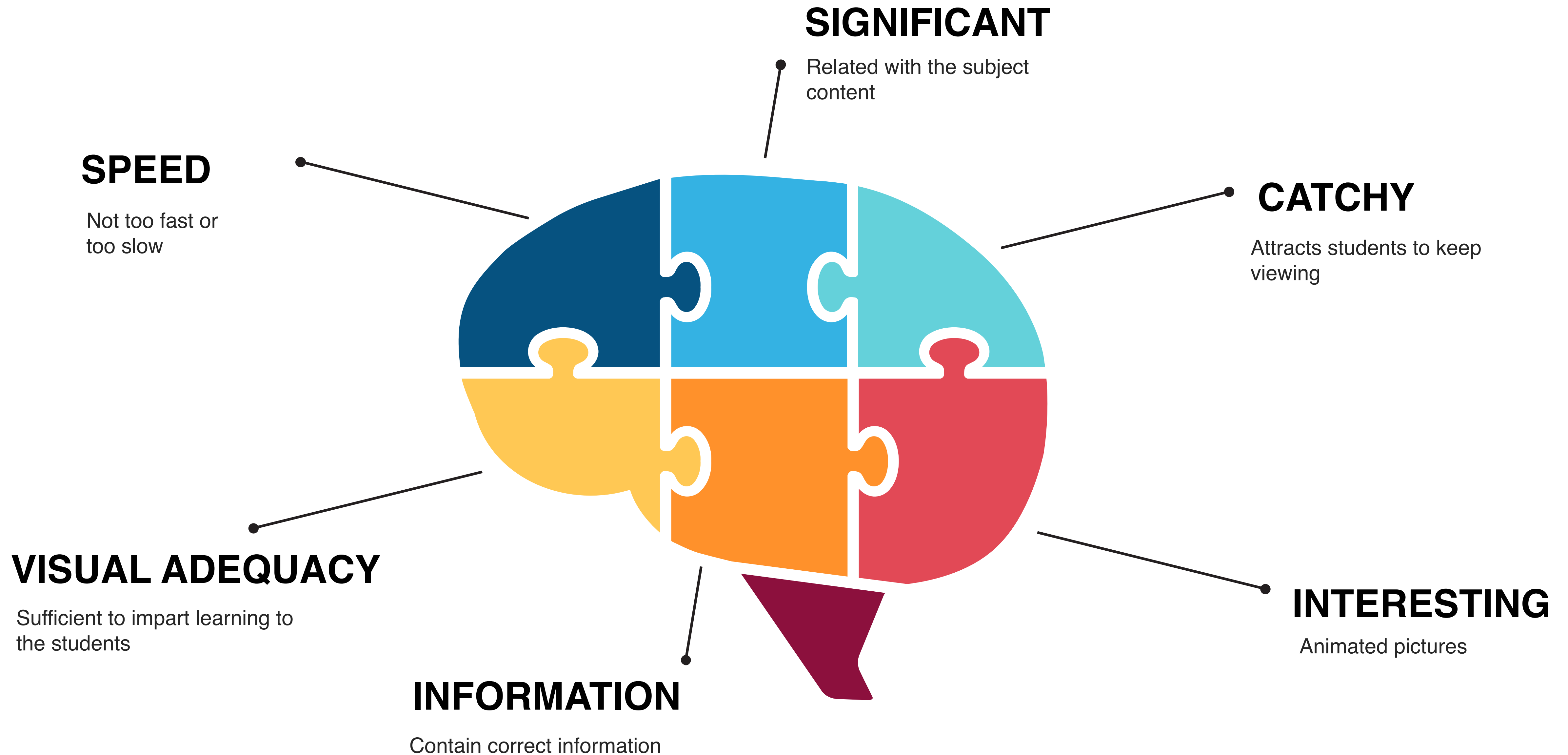
Test range

100 mm



BACK

EXIT





Take home point

## Animated GIFs

1. Engaging
2. Effective
3. Efficient