

DAY 2 - KPSI: MATTER AND FORCES

	 I don't know	 I know a little	 I could explain it
Can you define the term " matter "?			
Can you describe the general properties of matter?			
Can you define the term " force "?			
Can you explain the types of forces ?			
Can you describe how forces can change an object movement ?			
Can you describe how forces affect materials ?			
Can you classify objects depending on how they change when a force is applied to them?			
Can you explain the properties of materials ?			

ACTIVITIES 2: FORCES

1. Watch the video "[What is force? – Part 2](#)" and complete the following questions by choosing the correct answer.

1.1. What is "force"?

- ☐ It is only a human pushing or pulling on an object.
- ☐ It is a push or pull upon an object resulting from its interaction with another object

1.2. What are the two types of forces?

- ☐ Contact forces and non-contact forces.
- ☐ Pulling or pushing an object.

1.3. What are contact forces?

- ☐ When an object pushes or pulls another object.
- ☐ When a force acts on an object without touching it.

1.4. What kind of force is "friction"?

- ☐ It is a non-contact force.
- ☐ It is a contact force.

1.5. What are non-contact forces?

- ☐ When an object pushes or pulls another object.
- ☐ When a force acts on an object without touching it.

1.6. What kind of force is "gravity"?

- ☐ It is a non-contact force.
- ☐ It is a contact force.

1.7. What are the effects of forces?

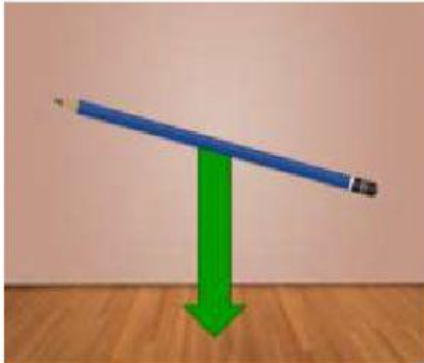
- | | |
|--|--|
| ☐ Start a movement. | ☐ Cooking. |
| ☐ Evaporation. | ☐ Change direction. |
| ☐ Change the shape. | ☐ Condensation. |
| ☐ Watching TV. | ☐ Stop movement. |

2. Choose the correct words to complete the diagrams about forces.

TYPES OF FORCES	
_____ forces When one object is in contact with another that pushes or pulls it. <u>Example:</u> • when you _____ a door to open it.  • when you _____ a door to open it. 	_____ forces When a force acts on an object without touching it. <u>Example:</u> • a magnet attracts paper clips without touching it (_____).  • Earth's _____ attract us to the planet's core. 

3. Classify the next examples as contact or non-contact forces.

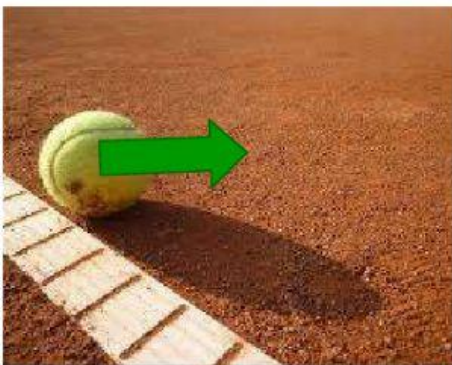
3.1. When a pencil falls to the floor (gravity).



3.2. When you kick a ball while playing football.



3.3. A ball moving on the floor (friction).



3.4. A magnet attracts some nails (magnetism).



3.5. A compass always points north (magnetism).



3.6. When you catch a ball (and stop it).



4. Complete the sentences and match them with their image.

It can change s_____.

•



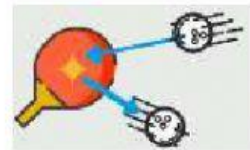
It can change d_____.

•



It can start m_____.

•



5. Complete the sentences and match them with their image.

malleable

elastic

rigid

a) An _____ object returns to its original shape when you stop applying a force to it.

b) A _____ object breaks when you apply a force to it.

c) A _____ objects changes shape but doesn't return to its original shape when you stop applying a force to it.

6. Tick the feature of these objects regarding how they change when a force is applied.

Hair bands They are ELASTIC _____  They are RIGID _____ They are MALLEABLE _____	Hair bands It is ELASTIC _____  It is RIGID _____ It is MALLEABLE _____
Plasticine It is ELASTIC _____  It is RIGID _____ It is MALLEABLE _____	Balloons It is ELASTIC _____  It is RIGID _____ It is MALLEABLE _____
Steel ruler It is ELASTIC _____  It is RIGID _____ It is MALLEABLE _____	Slime It is ELASTIC _____  It is RIGID _____ It is MALLEABLE _____
Clay It is ELASTIC _____  It is RIGID _____ It is MALLEABLE _____	Rubber It is ELASTIC _____  It is RIGID _____ It is MALLEABLE _____