

FORCE, WORK & ENERGY

Name: _____ 3º ESO _____

1. Listen and fill the gaps.

Hey! Today mama **has asked** me to **clean** the garden. Yes, we **should remove** all the stones. I can't move it! Can you help me? Sorry! Mama won't allow that. **Put** some more **_____**! What **is** **_____**? When we **try** to **_____** or **_____** something it **means** we **are putting** force.



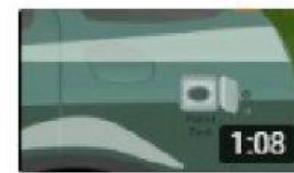
Yes! To **stop** something also we **need** to **_____** force. Oh! Thank you! Do you **know** force can also **change** the **direction** of the things?

Let's focus on **_____**. Oh! I've **done** a lot of **work**. I **pushed** that **stone** too much. In *science language*, you **have not done** any **work**. Why? Whatever **force** you **_____** but if **things do not move**, that **means**, **work is not done**. Why?



Oh! So let me **leave** this big **stone**. Let me **_____** these smaller ones. Yeah! This **is** the right **choice**. At least you're **moving** few **things** and some **work is being** **_____**.

Oh! I **don't have** **_____** to **walk**. I **don't have ability** to **work**. I'm tired. Yes, you're right. **Energy is ability to work**.



Do **cars** also **use energy**? Yes, they **use** **_____** or **gas** as **energy**. So the **coal**, or **gas**, **has** **energy** which **makes** **things to** **_____**. All **things require** **energy to move**. So we **can** **_____** **energy**. Yes, **energy can be stored** like in the **petrol tank** of a **car**.

Oh! I **used** so much **force** and **energy** but very less **work was done**. Yes. To me **you applied** lot of **force** and **you used** so much of your **_____** **energy** but she **would** only **move** few **things**. Hands. Less **work was done**.

Now we **would see** different **_____** of **energy**. Oh! This **bulb is giving** so much of **_____**. Yeah! Adverse on **electric energy**. Hey! This **fire is giving** so much of **heat**. This **is called** **_____ energy**. Okay. Tell me! What **energy** is this? You're **doing work** with your **muscular energy**. Oh! It **is** so **hot** here! You know where **heat is coming** from? Yeah! I know. It **is** all **coming** from the **_____**. Yes! You're right. **Energy** which **comes** from the **Sun is called** **solar energy**.



You know this **_____** at night **does not need** **electricity**.

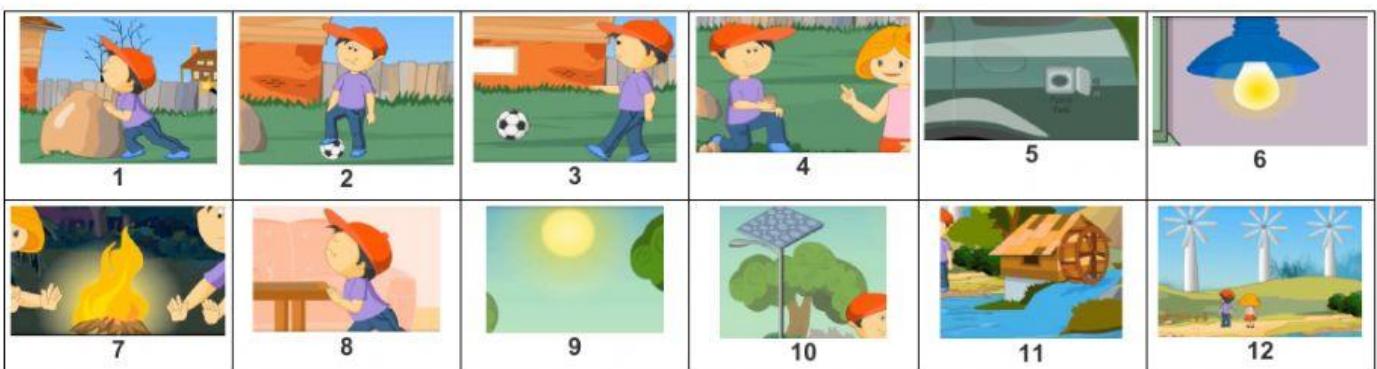
You **see** that panel. Yes. It **stores** solar energy during the **day** from Sun and at night it **gives** that energy to the **bulb**. Oh! So this but **works** on **solar energy**.

Let me **show** you **something**. Hey! _____ **has** so much **force**. Oh! This **is** **energy** of **water** with more **things**. Hmm. This **is called** **water energy**. Yeah! This **is called** **hydroenergy** because **water** **is** also **called** **hydro**.

Oh! These **are** big _____. These **are called** _____. They **produce** **electricity**. Hey! Listen! **Wind helps** in **electricity** also. This **is called** **wind energy**. Hey! Listen! It's **getting** so _____! Let's **go home**.



2. Listen and choose the described image.



1 ^a :	2 ^a :	3 ^a :	4 ^a :	5 ^a :	6 ^a :
7 ^a :	8 ^a :	9 ^a :	10 ^a :	11 ^a :	12 ^a :

3. Working on groups, describe the selected image. Then read the description to Elisabeth. She should guess it.