



FEINES D'ESTIU

2017-2018

Assignatura: Technologies (English)
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Curs: 2n d'ESO

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4. **Draw** two signs of each type indicating their meaning.

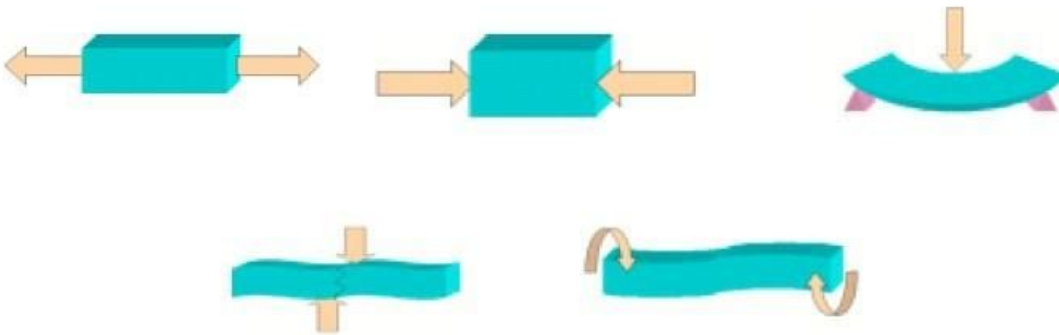
Unit 2. Structures

1. Define:

a. Force:

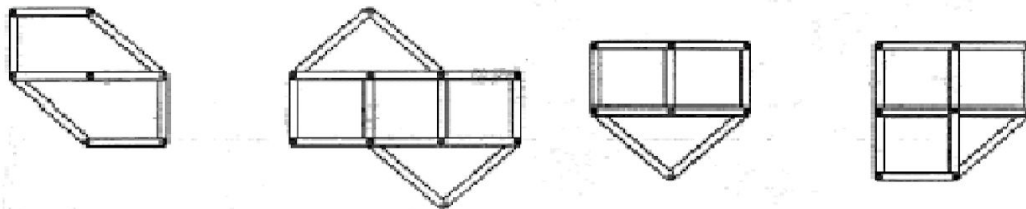
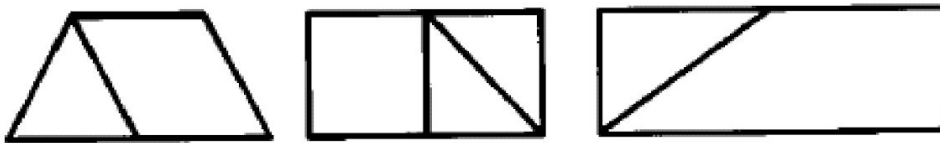
b. Structure:

2. Label the stresses each element bears:



3. Write down (with examples) the functions a structure is made for:

4. Draw the **minimum** beams in order to make these structures stable



Unit 3. Mechanisms

1. Indicate the class of the following levers **labeling the fulcrum, the force and the resistance.**

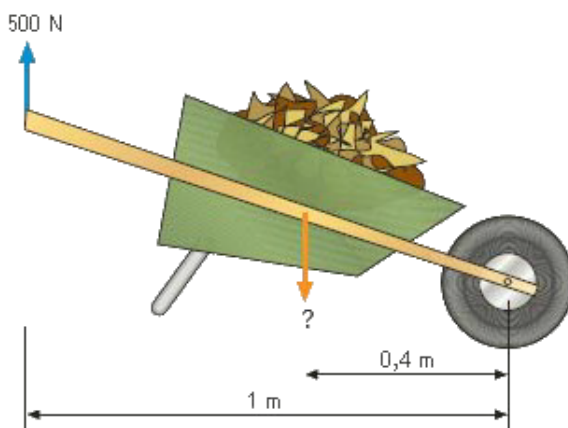


2. Calculate the force needed to raise freehand 500 kg.

b. And if we have an inclined plane that is 12 m long and we want to raise the load 3 m?

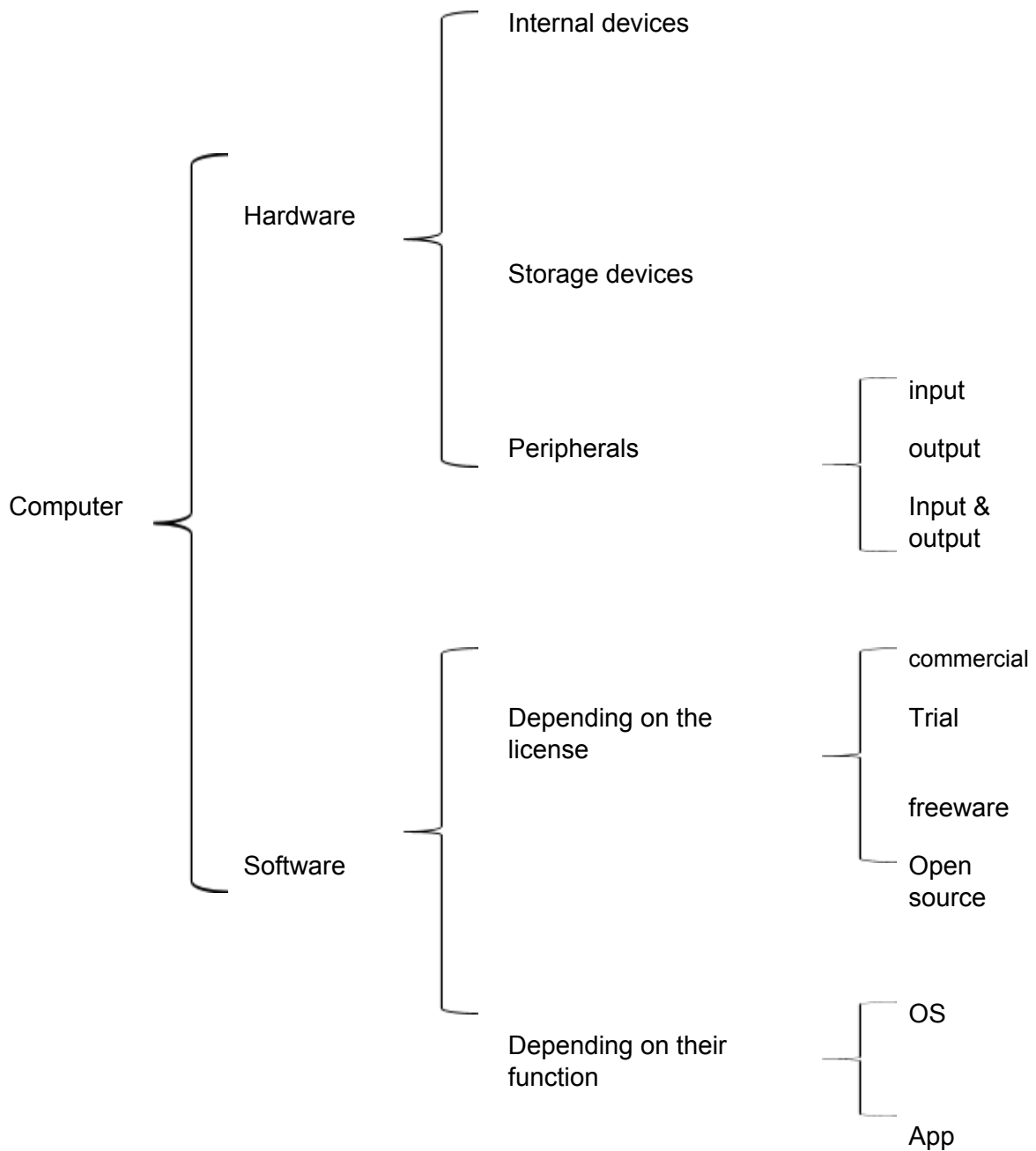
3. To raise 3 m a load of 10000 N on an inclined plane that is 15 m long, we need to apply a force of...

4. I can apply a force of 700 N, calculate the load I will be able to transport with the following wheelbarrow.



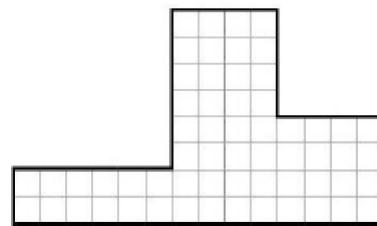
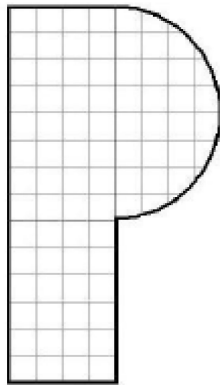
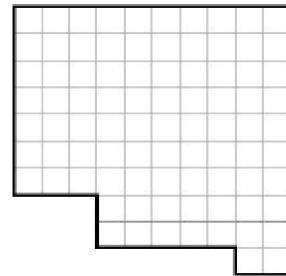
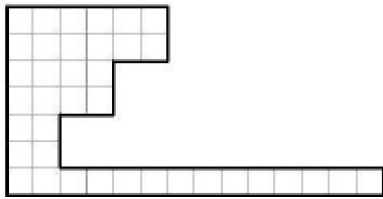
Unit 4. Computer: *hardware* i *software*

1. **Research and write down** the following concepts regarding to the computer:



Unit 5. Technical drawing

1. **Dimension** the following figures if each squares represents 10 mm



2. **With which type of scale** would you represent the following elements on an A4 sheet?

- a. Europe:
- b. A mobile phone:
- c. A laptop:
- d. An apple:
- e. Your bedroom:
- f. A dog:
- g. A fly:
- h. The Empire State Building:

3. **Complete:**

SCALE	DRAWING	REAL
1:20	5 cm	
1:100	35 cm	
2:1	7 cm	
1:2	2 cm	
1:5		40 cm
1:10		40 cm
1:50		5 m
2:1		10 cm
	4 mm	2 mm
	10 cm	40 cm

- 4. Draw the orthogonal views** of one of the projects you have done during the last year. Remember that you need to download and print the A4 file you can find on the Technologies' Department website.

Report

1. **Prepare a Report** of the wood game your group did during the first term. If you do not have exact dimensions, you can approximate them. You can find an example both on CIDE's website and on the GClassroom.

Scratch

1. **Make** the first practice of Scratch. You can find the information on the GClassroom. Once finished, please send the link to your teacher using your GMail.