DYNAMICS
Teaching notes

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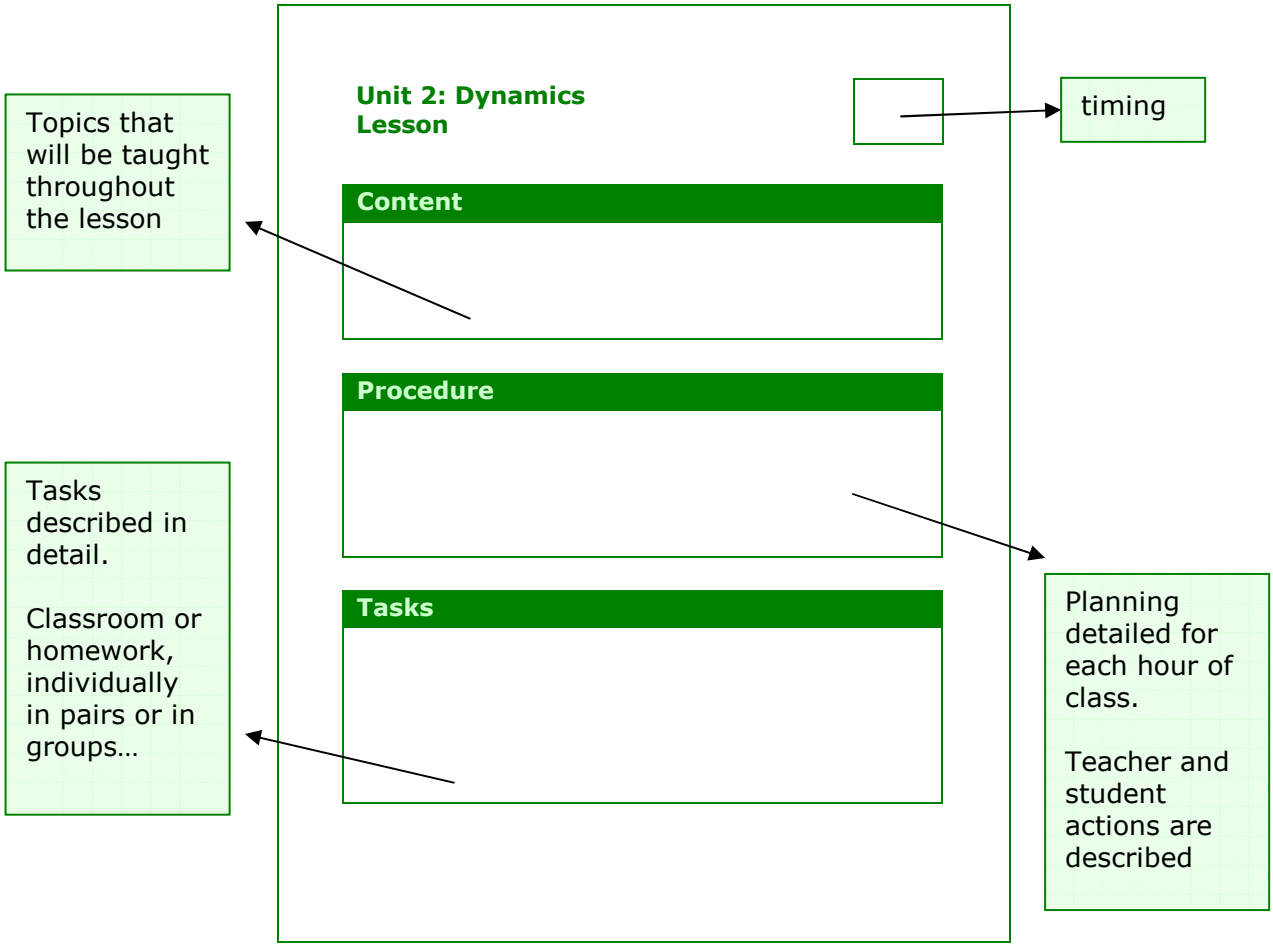
Introduction

Teaching through a foreign language implies using a specific methodology due to the student's lack of language skills. This means that teaching strategies may take on consider both content and language, that is the aim of CLIL methodology, to integrate both fields: the subject itself and the language needed to achieve it.

The teaching notes have been structured according to the number of lessons proposed in the lesson plans. In each lesson the information provided has been organised as follows:



Solutions for all the tasks are provided at the end of each lesson. Activities are codified as follows: **Activity X.Y**; Where **X** is the number of the lesson and **Y** the number of the activity in that lesson, i.e. activity 2.3 is the 3rd activity in lesson 2.

Activities have been labelled with different symbols in order to identify them as:

Formative assessment	Summative assessment	Low Order Thinking	High Order Thinking	Information and Communication Technologies
F A	S A	LOT	HOT	ICT

Activities from the student worksheets should be delivered gradually. It is recommended not to deliver the whole handout of activities in one lesson in order to assure progression over time.

Unit 2: Dynamics

Lesson 1: Newton's laws of motion

3h

Content

- 1st law: Inertia law.
- 2nd law: Fundamental law.
- 3rd law: Action – reaction law.

Procedure

1st hour

In this first hour the content is introduced to the students. The language needed is provided at the same time and its learning is assessed in the activity detailed below:

- PowerPoint
  - Teacher shows the PowerPoint and explains all its content.
  - Students make notes.
- Fill in the gaps
  - Teacher delivers activity 1.1
  - Students solve individually activity 1.1

2nd hour

In this second hour students practise the language learnt the day before and assess their knowledge by defining and describing the language and the content learnt.

- Crosswords
  - Students work in pairs.
  - Teacher delivers crosswords labelled A and B to each pair. Activity 1.2
  - Solutions for the crosswords are discussed in plenary.
- Describing cards
  - Students work in pairs.
  - Teacher delivers a set of cards to each pair. Activity 1.3
  - Solutions for the cards are discussed in plenary.

3rd hour

In this third hour students assess their knowledge by summarising, evaluating and creating content.

- Subtitling
  - Teacher delivers activity 1.4 and explains the instructions.
  - Teacher shows the video and the web 2.0 needed.
  - Students start preparing the activity in groups of 4.
  - The activity is finished at home and delivered at the end of the unit.
- Performing
  - Teacher delivers activity 1.5.
  - Students start preparing the activity in groups of 4.
  - The activity is finished at home and delivered at the end of the unit.

Tasks			
1.1	Taking notes + fill in the gaps LOT F A	Students watch a Power-Point presentation about the main theory involved in the lesson. They make notes while watching the slides. After that, students solve a gap-fill text related to the content shown in the Power-Point.	Individually classroom
1.2	Crosswords LOT F A	Students work with the new vocabulary and the language for defining. Each student has half of the crossword solved. Student A asks student B for a definition of one of their missing words. Student B provides him with a definition or an explanation. Then roles are changed until both of them have the whole crossword solved.	In pairs classroom
1.3	Describing cards LOT HOT F A	Students use the language for describing. Scaffolding is provided in the student worksheet for activity 1.3. Each pair of students gets a set of cards that are placed face-down on the table. Student A picks up the first card and explains its content to student B. Student B sketches on a piece of paper the situation and tries to explain it according to the 3 laws of motion.	In pairs classroom
1.4	Subtitling HOT ICT S A	Students watch a video in the classroom and start preparing the subtitles they will add later. The students work in groups of 4 and finish the subtitling at home. They deliver the final video to the teacher by sending the URL by email or using the moodle course.	In groups of 4 classroom & homework
1.5	Performing HOT ICT S A	Students prepare a sketch (video, theatre…) where the 3 laws of motion may be clearly described and shown. The script is free and may be discussed in the classroom. The format of the performance is also free, but it may last 2 minutes at least. Teacher might propose some themes. Teacher will pay attention to the content and also to the use of specific language. The final outcome will be delivered to the teacher at the end of the unit.	In groups of 4 classroom & homework

Activity 1.1

Fill in the gaps

After watching the ppt presentation and taking some notes, students complete the gap-fill activity.

There are more words than gaps so students should be encouraged to select carefully.

The solution is:

Newton's laws of **motion** are three physical laws that form the basis for classical **mechanics**. They are:

1. In the absence of **force**, a body either is at rest or moves in a **straight** line with **constant** speed.
2. A body experiencing a force $\vec{F}$ experiences an **acceleration** $\vec{a}$ related to $\vec{F}$ by $\vec{F} = m \cdot \vec{a}$, where *m* is the mass of the body.
3. Whenever a first body exerts a force $\vec{F}$ on a second body, the second body exerts a force $-\vec{F}$ on the first body. $\vec{F}$ and $-\vec{F}$ are equal in **magnitude** and opposite in **sense**.

These laws describe the relationship **between** the forces acting on a body and the **motion** of that body. They were first **compiled** by Sir Isaac Newton in his work *Philosophiæ Naturalis Principia Mathematica*, first published on July 5th, 1687. Newton used them to explain and **investigate** the motion of many physical objects and systems.

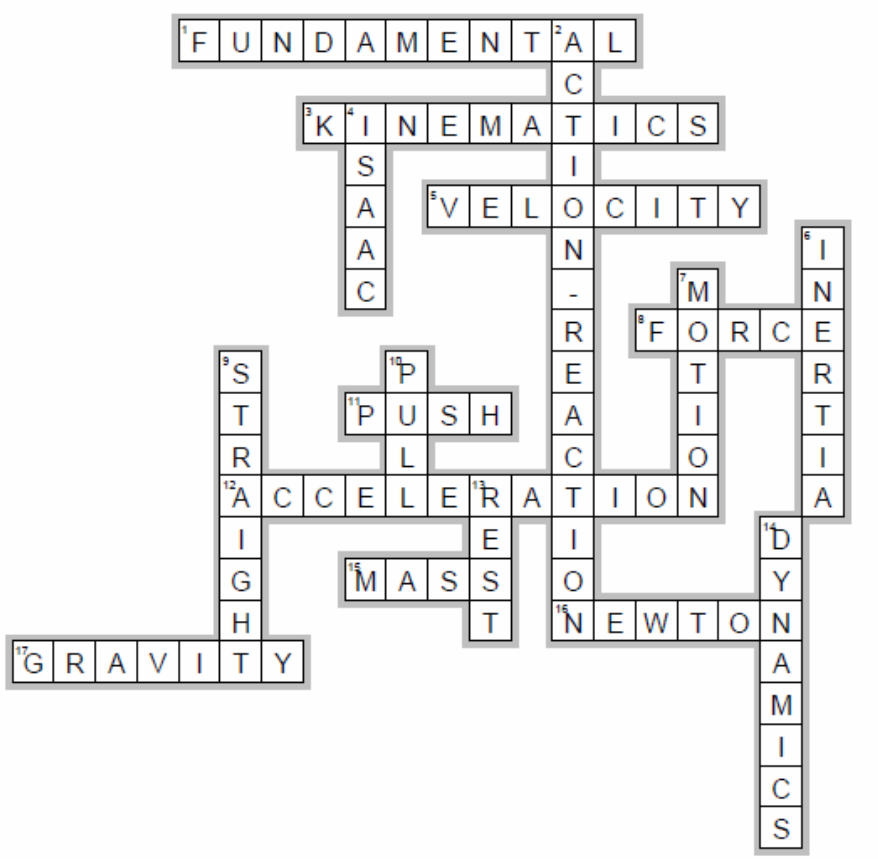
And the words worthless are:

	velocity			vector		
			displacement	$\vec{p} = m \cdot \vec{v}$	$\vec{v}$	direction
	$\vec{a}$					

Activity 1.2

Crosswords

- Students work in pairs.
- Each pair of students gets a two crosswords labelled A and B. Each student takes one of them. They can not see the other one!!
- Crosswords A and B have half the words filled in. The words are different so by adding them the crossword is completed.
- Student A asks student B for the missing words and so do student B with his or hers.
- When one of the students asks for a word, the other one may provide him or her with a suitable definition or description. (scaffolding is provided in the student handout)
- The solution is as follows:



Crosswords labelled A and B are provided in the supplementary material.

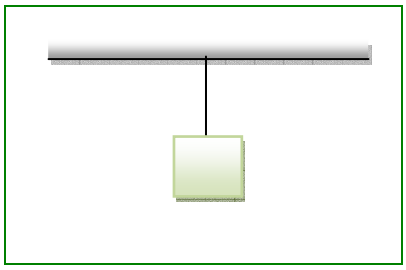
Activity 1.3

Instructions

- Teacher prints the cards from the supplementary material. (they have to be covered in plastic and cut up)
- Students work in pairs.
- Each pair of students receives a set of cards and uses the instructions in their handout to scaffold linguistically the activity.
- The cards have to be placed face-down.
- First student (student A) picks up a card and explains his or her partner what is shown.
- Second student (student B) sketches it on a piece of paper and tries to explain what happens using the Newton's laws of motion.
- Roles are changed now and student B picks up a card.
- The activity finishes when there are no more cards to be picked up.

Example

Student A picks up this card and gives an explanation:



A cubic body is hanging vertically from the roof.

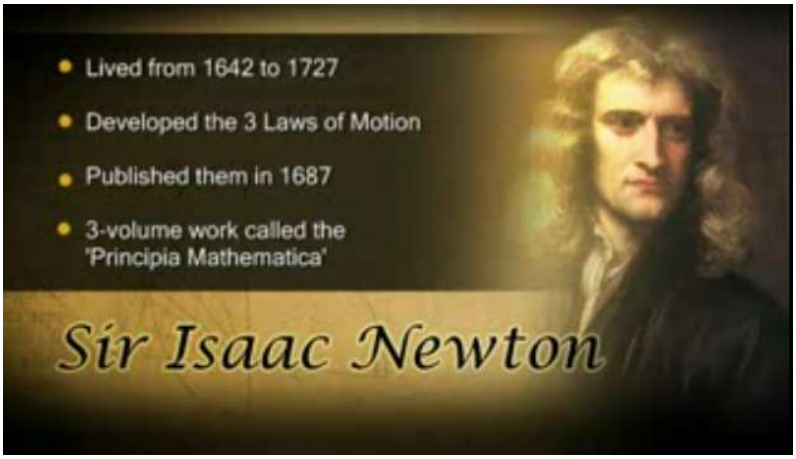
Student B tries to sketch it (not shown) and hypothesises an explanation such as:

> *The forces acting upon the cubic body are balanced so that there is no resultant force. According to the Newton's first law, the body will remain at rest because no unbalanced force is acting upon it and therefore no change in its motion will be produced.*

Activity 1.4

Instructions

- Students will work in groups of four
- Students will add subtitles to a short video available on Youtube.
- The teacher shows the video in the classroom and explains where the subtitles may be added. This is the video:



http://www.youtube.com/watch?v=iH48Lc7wq0U

- Students don't have to translate the speaker. Instead they will add some short sentences describing the examples shown in the video after introducing each of the three Newton's laws.

- Students will use a web 2.0 tool in order to add the subtitles.

dotSUB
ANY VIDEO ANY LANGUAGE

http://www.dotsub.com

- The teacher delivers the handout with the specific instructions for using the tool.
- The activity is for homework.

ICT Scaffolding

A handout with specific instructions for using the web 2.0 tool.

Language Scaffolding

The language scaffolding needed has been already provided in activity 1.3.

Activity 1.5

Instructions

- Students will work in groups of four
- Students will create a short performance.
- The teacher explains the main aims for the performance:
    - It should show clearly the 3 laws of motion.
    - It may last at least 2 minutes and it won't last more than 5.
    - The format can be a video-clip or a short drama sketch.
    - It will be a homework activity although they can start to write the script in the classroom.
    - The script must be checked by the teacher before starting to produce it.
    - It has to be delivered to the teacher at the end of the unit.

Video-producing Scaffolding

The teacher will provide it as needed.

Language Scaffolding

Actions:

To edit
To dub
To focus
To record
To rehearse
To screen

Lights, camera, action!

Vocabulary:

Actor/actress
Close-up
Credits
Crosscut
Cut
Developing shot
Director
Documentary
Fade (out/in)
Frame
Long/Medium shot
Producer
Take
Scene
Script
Storyboard

Find the definitions for the vocabulary here:

http://quizlet.com/familiarize/168298/

Unit 2: Dynamics

Lesson 2: Types of forces and vectors

3h

Content

- Vectors (adding, subtracting, resolution)
- Weight
- Normal
- Tension
- Friction

Procedure

1st hour

In this fist hour the content is introduced to the students. The language needed is provided at the same time and its learning is assessed in the activity detailed below:

- PowerPoint (slides 1 to 5)
  - Teacher shows the slides and explains all its content.
  - Students make notes.
- Jigsaw text
  - Teacher delivers activity 2.1 and students solve it individually
- PowerPoint (slides 6 to 10)
  - Teacher shows the slides and explains all its content.
  - Students make notes.
- Representing forces
  - Teacher delivers activity 2.2 and students solve it individually

2nd hour

In this second hour students practise the content learnt the day before and assess their knowledge by analysing graphs and formulae. The language for problem solving is also introduced.

- Matching cards
  - Students work in pairs.
  - Teacher delivers a set of cards to each pair. Activity 2.3
- Problem solving
  - Teacher delivers activity 2.4 and students start solving it, they finish it at home.

3rd hour

In this third hour students assess their knowledge by checking their answers and plan a high order thinking (HOT) activity where ICT will be involved.

- Problem solving
  - Teacher corrects activity 2.4 and students discuss it in plenary.
- Problem-creation
  - Teacher explains instructions for activity 2.5
  - Students individually create and solve a set of three short problems.

Tasks			
2.1	Making notes + jigsaw LOT F A	Students watch a Power-Point presentation (slides 1-5) about the main theory involved in the lesson. They make notes while watching the slides. After that, students solve a jigsaw text related to the content shown in the Power-Point.	Individually Classroom
2.2	Making notes + representing LOT F A	Students watch a Power-Point presentation (slides 6-10) about the main theory involved in the lesson. They make notes while watching the slides. After that, students represent forces in a set of graphs shown in the activity worksheet.	Individually (may be in pairs) Classroom
2.3	Matching cards LOT F A	Students work in pairs. Each pair of students is given a set of cards, half of them with a picture and half of them with formulae. Students match formulae with charts. (kind of memory)	In pairs Classroom
2.4	Problem solving HOT S A	Students solve exercises from a sheet. Scaffolding on problems instructions is provided as well as mathematical vocabulary.	Individually Classroom & Homework
2.5	Problem-creation HOT ICT S A	Students create 3 short problems using twitter. They also have to solve (using twitter) three problems from a partner.	Individually Classroom & Homework

Activity 2.1 jigsaw

Instructions

A text is provided to the students with all the sentences mixed up. Students have to organise all the sentences in order to make sense.

The text is:

A force is represented with a vector because forces are physical quantities which need three properties to be completely described: magnitude, direction and sense. Being considered a vector allows forces to be added easily, so that finding the resultant force acting upon a body becomes a matter of seconds.

Vectors are very useful too to represent graphically forces. Firstly it facilitates a lot the problem solving because we can see any situation in a very meaningful way. Then it is really helpful when a force has to be decomposed in order to work out a resultant force and the possible motion afterwards.

And the sentences have been split in this way:

1 – Vectors are very useful too to represent graphically forces.
2 - Then it is really helpful when a force has to be decomposed
3 - so that finding the resultant force acting upon a body becomes a matter of seconds.
4 - magnitude, direction and sense.
5 - A force is represented with a vector because forces are physical quantities
6 - in order to work out a resultant force
7 - Being considered a vector allows forces to be added easily,
8 - Firstly it facilitates a lot the problem solving because
9 - and the possible motion afterwards.
10 - we can see any situation in a very meaningful way.
11 - which need three properties to be completely described:

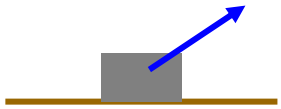
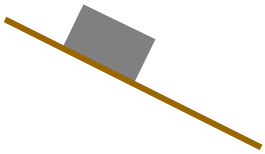
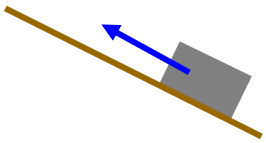
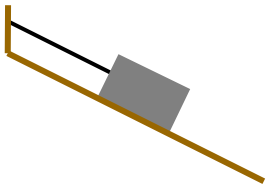
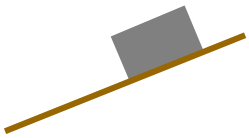
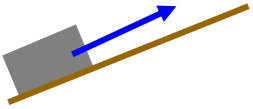
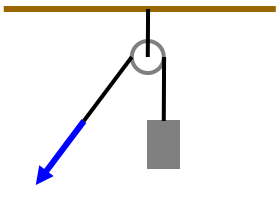
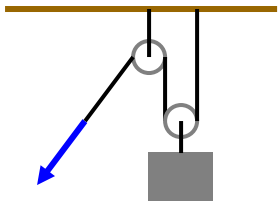
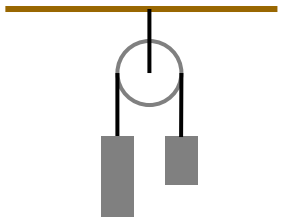
The order to be followed is:

5 – 11 - 4 – 7 – 3 – 1 – 8 – 10 – 2 – 6 - 9

Activity 2.2 matching cards

Instructions

- After watching at the slides and making some notes, students look at the following pictures carefully and draw all the forces involved. If any force needs to be decomposed they also do it.

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

External force:

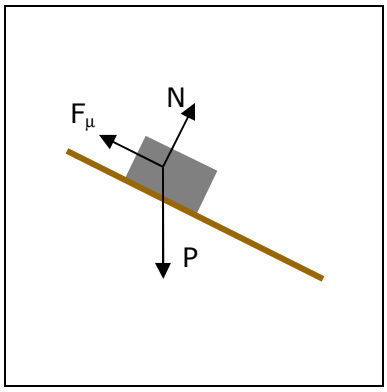
Activity 2.3 matching cards

Instructions

- Students work in pairs.
- Teacher delivers a set of cards to each pair of students.
- There are two kinds of cards, some with a force diagram and some with formulae.
- Students have to match every picture with its right formulae.
- The rules are those of *memory*.

- The cards can be found in the supplementary material. They should be printed (as many copies as pairs), covered in plastic and cut up.

Example of matching:



$$N + P_\eta = 0$$

$$F_\mu + P_\tau = m \cdot a$$

Rules

- All the cards are spread and placed face-down on the table.
- Student A picks up two cards; s/he shows them to student B.
- If the cards match, student A keeps them, if not, the cards are placed face-down again in the same place.
- Then student B plays the game.
- The game will finish when no cards are on the table.

Scaffolding

- The scaffolding needed was provided in slide 10 of the Power-Point 'lesson 2'

Activity 2.4 problem solving

Instructions

- Students work individually
- Teacher delivers a worksheet with some exercises to be solved.
- Students start solving them in the classroom and finish them at home.

The sheet can be found in the supplementary material.

Scaffolding

- Students read the instructions for every exercise and ask for doubts if any.
- Some mathematical language is provided in the student worksheets.

+	plus	<	less than
-	minus	>	greater than
·	times; multiplied by	||	parallel to
/	over; divided by	∟	perpendicular to
=	equals	$\sum$	sum; summation

$P = m \cdot g$	Weight equals mass times gravity
$\|P_\eta\| = \|N\|$	Normal component of weight equals normal
$a = \frac{F}{m}$	Acceleration equals force over mass
$F_\mu + T = m \cdot a$	Friction plus tension equals mass times acceleration
$m \cdot a = -\mu \cdot m \cdot g$	Masses from both members can be cancelled
$\sum F_x = 0$	Summation of forces in X direction equals zero

Activity 2.5 problem creation

Instructions

- Students work individually.
- Students will work using two social networks:

twitter

twubs

- Every student proposes a set of three short problems based on 2nd Newton's law.
    - Problem 1 – The unknown will be the force *F*.
    - Problem 2 – The unknown will be the mass *m*.
    - Problem 3 – The unknown will be the acceleration *a*.
- Every student will answer three problems proposed by his/her partners. They must be one of each type and they don't need to be proposed by the same student.
- Students plan their problems in the classroom and upload them and solve their partner's ones at home.
- They post the answers at the twub dash created. They can not answer a problem that has been already answered. At the end there will be as many problems as answers.

One problem gets one answer

Twitter is a social network where users can publish (tweet) posts not longer than 140 characters. This is the crucial thing; students will have to think of short instructions in order to be able to publish them.

All the tweets (the problems…) will be published in a twubs the dash created by the teacher. All the students will be able to publish their problems here and they will be also able to answer their partners' ones.

- Both teacher and students need a twitter account which can be easily created at http://www.twitter.com.
- Teacher will create a specific dash at http://www.twubs.com where all the users will submit.

Scaffolding

Some instructions on twitter and twubs are provided.

Alternatives

- This activity can also be displayed in a traditional way by collecting all the exercises proposed and delivering them back to the students.
- The problems could be also posted in a blog, in a forum (in a moodle course), in Facebook… but I personally think twitter suits better because of the limitation to 140 characters in the posts. This will challenge the students.

Unit 2: Dynamics

Lesson 3: Archimedes' Principle

2h

Content

- Archimedes' Principle
- Floating & sinking
- Density

Procedure

1st hour

In this fist hour the content is introduced to the students. The language needed is provided at the same time and its learning is assessed in the activity detailed below:

- PowerPoint
  - Teacher shows the slides and explains all its content.
  - Students make notes.
- Letter
  - Teacher delivers activity 3.1 and students solve it individually.

2nd hour

In this second hour students practise the content learnt the day before and assess their knowledge by solving some problems.

- Problem solving
  - Teacher delivers activity 3.2 and students start solving it, they finish it at home.
- Research
  - Teacher delivers activity 3.3 and students make a research and deliver the results at the end of the unit.

Tasks

3.1	Letter HOT F A S A	Students solve Archimedes' crown mystery. They take the role of Archimedes and they write a letter to the king explaining him what they have discovered. They have to justify it.	In pairs Classroom
3.2	Problem solving HOT S A	Teacher delivers a sheet with some exercises about Archimedes' Principle. Students solve it in the classroom and finish it at home.	Individually Classroom & Homework
3.3	Research HOT ICT S A	Teacher shows two real problems and students hypothesise about them. They deliver a scientific report at the end of the unit about it.	In groups of 4 Classroom & Homework

Activity 3.1 letter

Instructions

- Students work individually.
- After watching the Power-Point presentation students have to answer the question shown in the last slide.
- Every student has a copy of a letter from the King of Greece asking Archimedes' for help.
- Students take the role of Archimedes and they answer the king providing him the solution and a wide explanation about the process followed to solve the mystery.

The King's letter is what follows:

Dear Archimedes,

I have heard of your great intelligence and some of your strange inventions have been shown to me recently. I must say your work is really excellent and it will help Greece in a very special way.

I am writing to you because I have a little problem that only your intelligence may solve. As you may know I ordered the royal artist to make a gold crown. I gave him a mass of gold and after two months the artist came back with a golden crown.

The weight of the crown is exactly the same than the gold he was given, but maybe there is only gold in the external surface while the core is made of lead.

I want to know if the artist has been cheating or not, but I don't want to break the crown. I firmly believe that you will be able to work out whether the gold is fully made of gold or not.

His Majesty,

King

Athens

- Teacher checks the understanding of the letter by asking the students about its content.

Scaffolding

All the scientific content needed has been provided in the slides of the presentation.

Details about Archimedes' biography may be searched in the library or internet.

Activity 3.2 problem - solve

Instructions

- Students work individually.
- Students solve the exercises proposed in the sheet they have in their worksheets.
- They start solving the problems in the classroom and finish them at home.

1- A body is completely sunk in water. Its mass is 10 kg and it seams to weigh only 30 N; Could you work out the body's volume?

2- If the liquid was mercury, find the mass of the body (consider volume found in 1) sunk into the liquid. (ρ_{Hg} = 13'6 g/cm^3)

3- We want to build a ship with a mass of 70000 tones. If we want to see the 70% of the ship when sailing through the sea, which would be its volume?

4- You have a beach ball with a radius of 20 cm and a mass of 350 g. Find out the force you should apply upon the ball to get it completely sunk into the water. (You're in a swimming pool)

5- We have a cubic box with a 10 cm side. The mass of the box is 200 g, work out how many mercury can you put into the box before getting sunk.

6- Explain, using Archimedes's Principle, why it is easier to swim in the ocean than in a swimming pool.

7- How could you easily rescue a treasure from the deep ocean?

8- "Ice floats on water"

- explain this sentence using Archimedes's Principle
- what's the biological advantage?

Scaffolding

Teacher will provide any help needed to understand the instructions of any of the exercises proposed.

Mathematical language support has been provided in activity 2.4.

Activity 3.3 research

Instructions

- Students work in groups of 4.
- They have to write a scientific report on one of the topics shown below.

1 - Ice melting

One of the consequences of global warming is the melting of ice in the poles. Especially dramatic is the situation in the Arctic where the whole mass of ice is thought to be melt in summer by 2030.

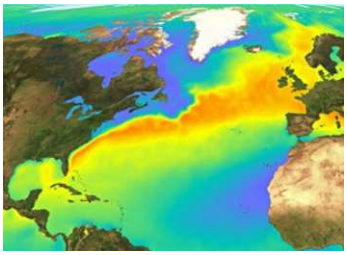
What is the problem about this?

2 - Elba river

Hydraulic engineering had a big problem in Elba river. The engineers designed a channel over the river where fluvial sailing would be enabled.

Which weight should it support? All the ships would be able to sail through the channel?

3 - Gulf stream



West coast of Europe, including the British islands, has a warmer climate than the east coast of America. Notice they both are at the same latitude. The reason is in the warm Gulf stream.

Why climate in Europe can be affected by ice melting in the Arctic?

4 - Panama channel

When Panama channel was opened it supposed a big safe in time and money because of the shortest trip.

How does the channel work?

Scaffolding

Language FOR reporting

- Use the passive.
- Avoid contractions, i.e. write *is not* instead of *isn't*, and personal references such as: *He, she, they, I…*
- Add references in your report, not only in the bibliography.
- Use connectors such as: *Firstly, secondly, then, however, otherwise, so that, meanwhile, after, before, furthermore…*

Unit 2: Dynamics

Lesson 4: Satellites

2h

Content

- Newton's law of Universal Gravitation.
- Forces perpendicular to velocity.
- Tides
- Artificial satellites (polar and geosynchronous orbits)

Procedure

1st hour

In this fist hour the content is introduced to the students. The language needed is provided at the same time and its learning is assessed in the activity detailed below:

- PowerPoint (slides 1-3)
  - Teacher shows the slides (1-3) and explains all its content.
  - Students make notes.
- Houston!! We have a problem…
  - Teacher shows slide 4 and introduces activity 4.1
  - Students hypothesise in pairs about an explanation for the question shown.
  - Solutions are discussed in plenary and finally slide 5 (it has the real answer) is shown.

2nd hour

In this second hour new content is introduced to the students. The language needed is provided at the same time and its learning is assessed in the activity detailed below:

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- PowerPoint (slide 6)
  - Teacher shows slide 6 and explains part of its content.
  - Students make notes.
  - When the questions (A tide here? Who is attracting?) appear, teacher asks the students to hypothesise about it. Activity 4.2 is introduced.
  - Students hypothesise about an explanation for the questions shown.
  - Solutions are discussed in plenary and finally slide 6 is completely shown. (it has the real answer at the end)
- On air…
  - Teacher explains activity 4.3.
  - Students in groups of 4 write activity 4.3 in the classroom.

Tasks			
4.1	Houston!! We have a problem… HOT F A S A	Students solve the Moon's mystery. They hypothesise about the question shown in slide 4. They have to come up with an explanation at a scientific level, using language appropriately.	In pairs Classroom
4.2	Tidal dance HOT F A S A	Students solve the tide's mystery. They hypothesise about the questions shown in slide 6. They have to come up with an explanation at a scientific level, using language appropriately.	In pairs Classroom
4.3	On air… HOT ICT S A	Teacher exposes a problem about a parabolic antenna. Students have to write the instructions in order to install correctly the antenna wherever you are in the Earth.	In groups of 4 Classroom & Homework

Activity 4.1 Houston!!! We have a problem...

Instructions

- Students work in pairs.
- After watching slides 1 to 3 from the presentation 'lesson 4', teacher shows slide 4.

- Students hypothesise about a possible explanation.
- Solutions are discussed in plenary.
- Finally slide 5 is shown by the teacher.

Scaffolding

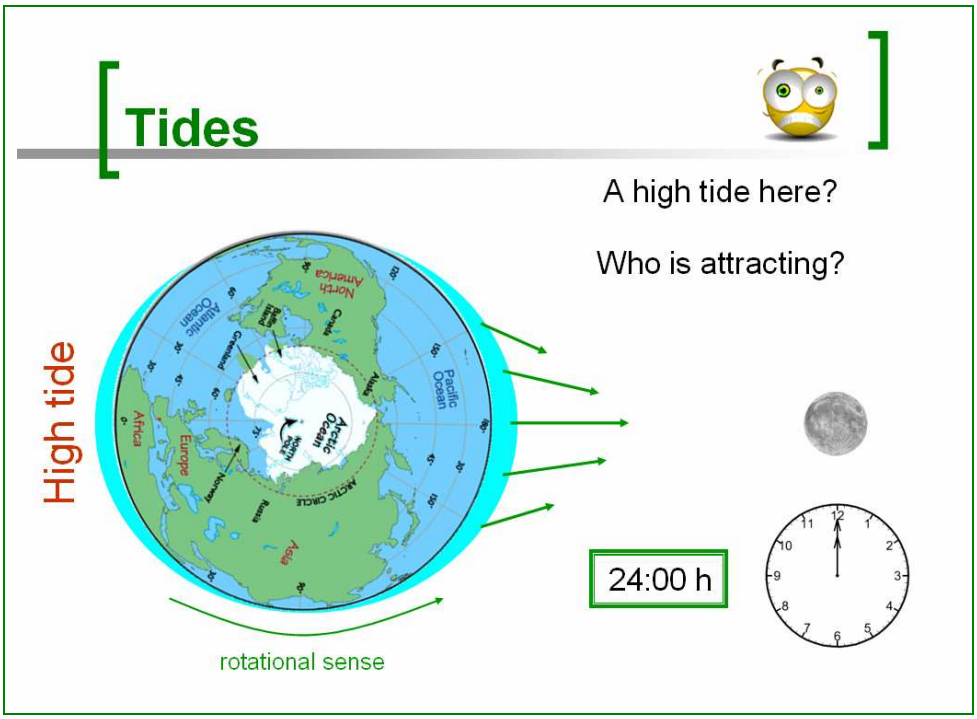
Language FOR hypothesising

- Use of conditionals.
  - *If* forms
  - *Perhaps* and *maybe*
- Use of modals.
  - *Can, could*
  - *May, might, must*
  - *Will, would*
  - *Shall, should*
- Verbs
  - *To consider*
  - *To believe*
  - *To think*

Activity 4.2 Tidal dance

Instructions

- Students work in pairs.
- Teacher presents slide 6 and stops it when the questions are shown.



- Students hypothesise about a possible explanation.
- Solutions are discussed in plenary.
- Finally slide 6 is completely shown by the teacher.

Scaffolding

Language FOR hypothesising (see activity 4.1)

Activity 4.3 On air...

Instructions

- Students work in groups of 4.
- Teacher presents to the students the following situation:

> *A TV technician wants to install a parabolic antenna in a house. Olympic Games are coming and the owners, who live in _____, want to follow their national athletes in the London 2012 Olympic Games.*
>
> *The technician has a big problem, the antenna has no installation instructions and he can not install it. S/he asks the company for instructions about the orientation of the antenna.*
>
> *Can you help him/her?*

- Students will write the instructions about the orientation.
- Teacher provides different locations for each group.
    - Sidney
    - Buenos Aires
    - Tokyo
    - Reykjavik
    - Barcelona
    - Toronto
    - Cape town
    - Bombay
- Students also introduce their specific instructions in a Google Map created by the teacher.

Scaffolding

Language FOR giving instructions.

- Use of passive.
- Non personal sentences.
- Be precise, remember KISS.
- Use of modals.

About Google Maps

- Some instructions have been provided in the supplementary material.

UNIT EVALUATION

Once the unit has been completely developed, it is really important to evaluate it. This evaluation has a main aim and it is to improve student learning in the future.

Every piece of content, assignment or language scaffolding can be improved so that this unit, as every single unit in my opinion, is an opened document where teachers may add, delete or modify whatever we consider.

Here you are some questions that may help you to evaluate the unit.

Teacher questionnaire:

- Were the content presentations accurate?

-	1	2	3	4	5	+

- Was anything missing about the content?

- Was the timing for the activities well programmed?

- Do the instructions for activities need any modification?

- Was there any language 'OF' missing?

- Was there any language 'FOR' missing?

- What kind of language 'THROUGH' has come up?

- What would you not repeat? Why?

- What would you change? Why?

- Which activity is the one that has succeeded the most?

Student questionnaire:

- Could you understand the language used in the presentations?

-	1	2	3	4	5	+

- Have you found any language help in the slides in order to understand the content?

-	1	2	3	4	5	+

- How would you evaluate the instructions?

-	1	2	3	4	5	+

- Was the scaffolding on language FOR (describing, defining…) useful?

-	1	2	3	4	5	+

- Which activity did you enjoyed the most? (explain why)

- Choose an activity that helped you to learn something. Explain what did you learn and why the activity helped you.

- Do you have any suggestion that may improve the unit quality?