

# **MEILIC SOCIAL SCIENCE PROGRAMME 2020 - 2021**

Universidad de Oviedo  
Departamento de Ciencias de la Educación  
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# **DATES (5 classes/units)**

- ⦿ **Day 1: Thursday, March 25. 17:00 – 18:30**
- ⦿ **Day 2: Thursday, April 8. 17:00 – 18:30**
- ⦿ **Day 3: Thursday, April 15. 17:00 – 18:30**
- ⦿ **Day 4: Thursday, April 22. 17:00 – 19:30**
- ⦿ **Day 5: Thursday, April 29. 17:00 – 20:00**

# UNIT 1

- ◎ Introduction
- ◎ Assessment
- ◎ Intro quiz
  
- ◎ What is Social Science?
- ◎ What kind of thinker are you?
- ◎ Activities, activities, activities!
  
- ◎ Reading, homework

# INTRODUCTION

- B.Sc. Physics (U of W), Ph.D. Physics (UCD)
- Worked as a scientist / educator for 30 years in industry, government, and academia
- Written articles and books on physics, math, general science, economics
- **Likes to look under rocks, open boxes, get hands dirty.**
- **ASKS “WHY?”**

# INTRODUCTION



**What?**

**Who?**

**Where?**

# INTRODUCTION



# INTRODUCTION

- A land whose “history began before the angelic clan.”
- World began on October 23, 4004 BC
- Blarney, Captain Boycott, Gerrymander
- The greenhouse effect (methane, CO<sub>2</sub>, ...)
- Beaufort scale (0, 1, ... 12)
- Daniel O’Connell – The Liberator

# MEILIC. Social Science Assessment

## 1. Group work project (40%)

- In **groups of 3 or 4**, design a project based on a topic of your choice, *e.g.*, world culture, international identities, nature, energy, recycling, sustainability, global trade, political groups, storytelling, ...
- Projects must comply with CLIL principles and activities planned using different techniques. You may use information from the Campus Virtual readings.
- Each project will be presented orally on **Day 5, April 29**. Fifteen minutes are allotted to each group to present 3 pages/slides per person. You can use visual aids. A picture showing the final product of the learning output is compulsory.



# MEILIC. Social Science Assessment

## Design process:

- Think about what kind of activities you would design to improve pupils' capacities from a linguistic point of view.
- Reflect about how these activities would help children develop their perception and their production from a scientific point of view.
- Include several activities with pupils' ages and abilities in mind.

# MEILIC. Social Science Assessment

## Possible topics:

- A sense of place (where I live, work, and breathe)
- Pancakes from around the world (recipes, meaning, holidays)
- World holidays (celebrating global culture)
- Global differences (views, opinions, and ideas)
- Maps and buildings (finding our way in the built landscape)
- Animals (connect pictures to country or continent)
- Earth Day (green games, the 3 Rs)
- Recycling (material classification, sorting, and construction)
- Sustainability (food, energy, transport, waste)

# MEILIC. Social Science Assessment

## Possible topics:

- A solar oven (sunlight on food, *e.g.*, bread, cheese)
- The water cycle (some simple experiments, states of matter)
- Who am I? (where, why, how?)
- Spanish history (timelines, boundaries, international relations)
- Fair trade (countries, people, workers)
- Future energy today (solar, wind, alternative renewable energies)
- Our town, village, city (everyday life, culture, history)
- Story telling (teaching with books, objects, found art, photos)
- The history of rubbish (quizzes, plays, songs)

# MEILIC. Social Science Assessment

## 2. Test (40%)

- You have one week to do a take-home test.
- Handed in personally on **Day 4, April 22.**
- A number of multiple-choice questions and an essay choice. Include all references.

# MEILIC. Natural Science Assessment

## 3. Individual work lesson plan (10%)

- A printed copy of a lesson plan for a 30-minute, Natural Science class, handed in personally on **Day 3, April 15.**
- The topic must be **DIFFERENT** than your project and done individually.
- Use one A4 size page and include author's name.

# MEILIC. Natural Science Assessment

The lesson plan **MUST** include at least the following elements:

- Activity name
- Level / Age
- Time
- Grouping (individual, pairs, groups, class)
- Materials/Resources (paper, tape, scissors, markers... / overhead projector, map, computer, bunsen burner, ...)
- Vocabulary
- Learning objectives
- Assessment
- Bibliography

# MEILIC. Natural Science Assessment

## 4. Homework (10%)

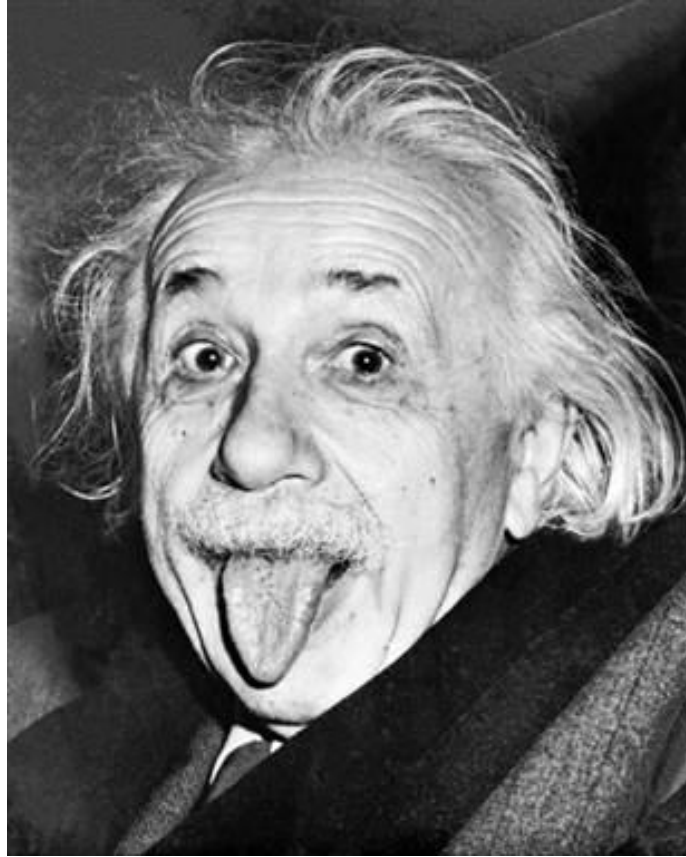
- A social science article, a statistical collection, show and tell.
- One A4 page (front and back if you need it).
- Binary marking.

# Introductory QUIZ

1. What is the largest country in the world by land mass?
2. What is the longest river in the world?
3. In what year did the world population reach 1 billion?
4. On which modern New World country did Christopher Columbus first land?
5. Who was the first president of the United States?
6. In what year was the first Earth Day?
7. In which city is the United Nations headquarters?
8. In what year did the United Nations start?
9. Who is the head of the European Union?
10. What is the total world GDP (in \$trillions)?



# What is Science?

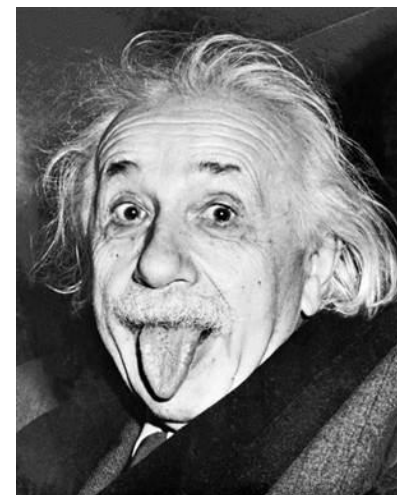
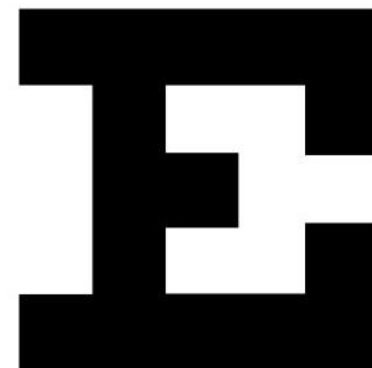
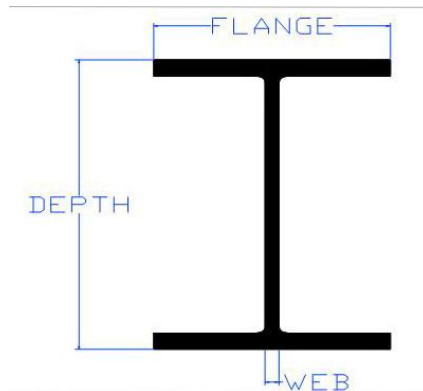
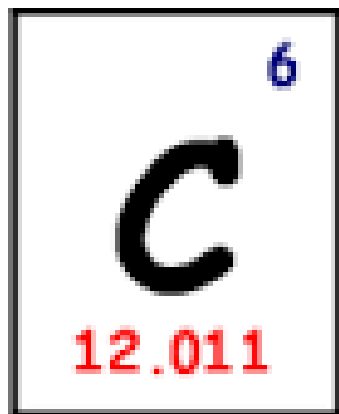


“Wisdom is not a product of schooling but of the  
lifelong attempt to acquire it.” **Albert Einstein**

Nothing in life is  
to be feared, it is  
only to be  
understood.

– Marie Curie





# What is Science?

- Observation (casual → ordered)
- Organized play / learning
- Repeatable



# My definition – looking under a rock



# **TEACHER**

Knowledge and Enthusiasm  
(and safety)

# **SCIENCE TEACHER**

Inquisitive  
ASK WHY?

**ACTIVITY-BASED**

# What is Social Science?

- Anthropology
- Archaeology
- Criminology
- Demography
- Economics
- **Geography**
- **History**
- International relations
- Law
- Linguistics
- Political science
- Psychology
- **Science education**
- **Society**

# What is Social Science?

- The Celts
- [Altamira](#), [Tito Bustillo](#)
- Torquemada
- [17 A. C.](#)
- \$1.536 trillion (10<sup>th</sup>)
- Gijia
- 1936
- OPEC, NATO, EU
- Napoleonic code
- Castilian (Galician, Basque, Catalan, ...)
- PSOE / Podemos / PP
- Jung, de Bono, ...
- Climate change
- Carbon footprint



# What Can I do with a Social Science Degree?

**Career options for Social Science graduates:**  
economics, geography, history, law, politics,  
psychology, sociology, ...

accountancy  
advertising/marketing  
banking and insurance  
business management  
economics  
local government  
management consultancy  
market research

media  
politics  
psychology  
retail and sales  
teaching and lecturing  
tourism  
town planning

# Employment Skills Obtained with a Social Science Degree

40 per cent of graduate employers do not ask for specific degree subjects. A range of transferable skills is more important, including:

<ul style="list-style-type: none"><li><b>analytical ability</b></li><li><b>communication skills</b> (verbal &amp; written)</li><li><b>data collection</b> (analysis &amp; interpretation)</li><li><b>numeracy and statistics</b></li></ul>	<ul style="list-style-type: none"><li><b>problem solving</b></li><li><b>project management</b></li><li><b>research</b> (quantitative &amp; qualitative)</li><li><b>team work</b></li></ul>
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# The Social Science Curriculum

GEOGRAPHY	HISTORY	SOCIETY
<p>The universe and solar system</p> <p>The earth: climate zones, seasons, landscapes</p> <p>Climate change, pollution, recycling, water as a natural resource</p> <p>Maps</p>	<p>Timelines</p> <p>Important events in Spain and Asturias</p> <p>Family – School – Town – Country</p>	<p>Types of government</p> <p>Democracy, Spanish Constitution, Citizenship</p> <p>Economics: Sectors, Jobs, Entrepreneurship, statistics</p> <p>Means of transport: private and public</p>

# **What kind of thinker are you?**

**Right brain / left brain (Julian Jaynes)**

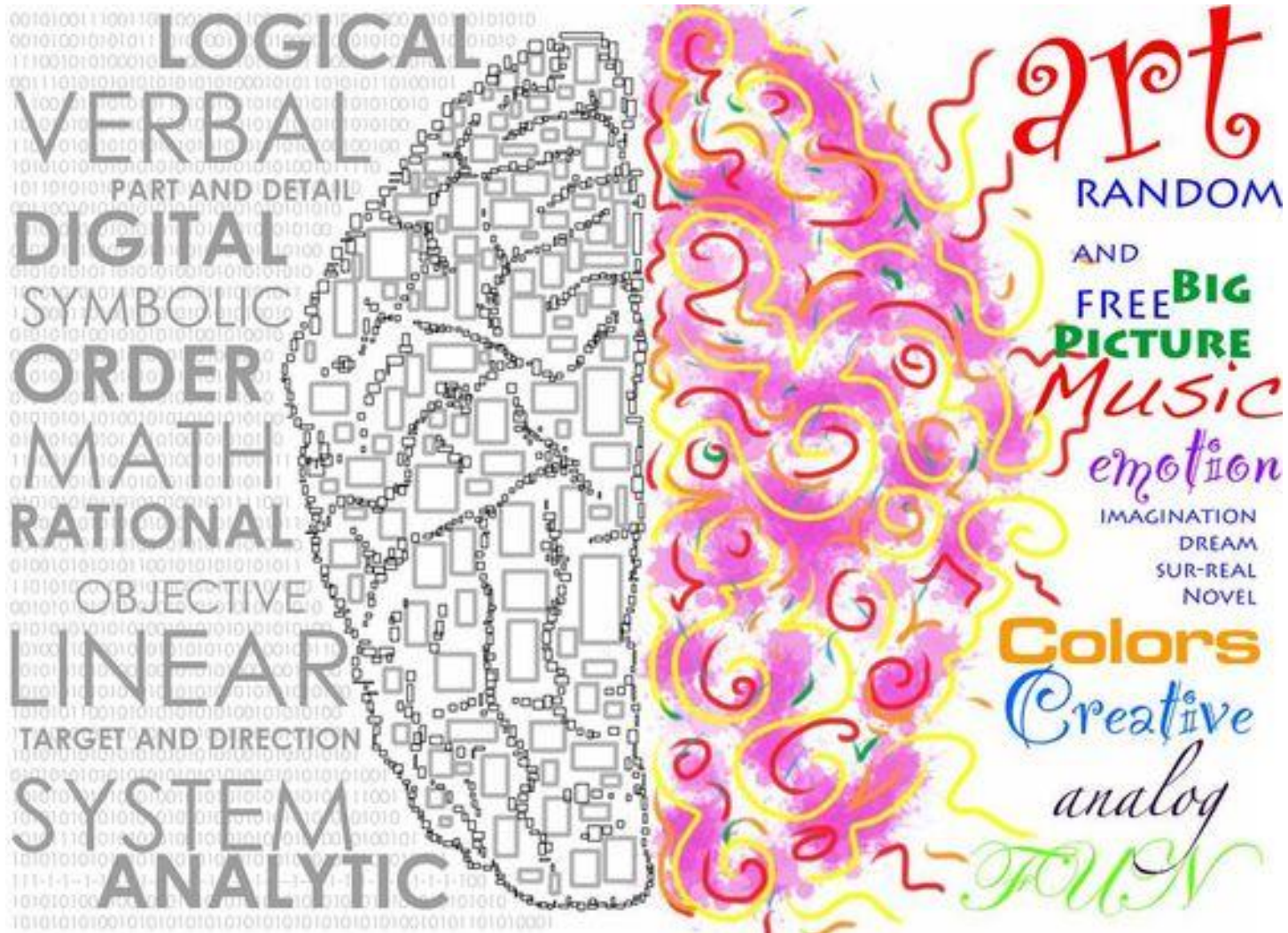
**16 personalities (Carl Jung)**

**Lateral (Edward de Bono)**

**Political spectrum (Self-gov)**

**audio/visual (?)**

# Right brain / left brain



# Right brain / left brain

Look at the words and say the COLOR not the word

<b>YELLOW</b>	<b>BLUE</b>	<b>ORANGE</b>
<b>BLACK</b>	<b>RED</b>	<b>GREEN</b>
<b>PURPLE</b>	<b>YELLOW</b>	<b>RED</b>
<b>ORANGE</b>	<b>GREEN</b>	<b>BLACK</b>

Left-Right conflict

Your brain insists on reading the word

# Carl Jung and Isabel Briggs Myers

Type test: 4 binomial markers giving 16 possible “types”

- **Extrovert/Introvert (E/I)**
- **Sensing/iNtuitive (S/N)**
- **Thinking/Feeling (T/F)**
- **Judging/Perceiving (J/P)**

# Carl Jung and Isabel Briggs Myers

## Analysts



"ARCHITECT"

INTJ (-A/-T)



"LOGICIAN"

INTP (-A/-T)



"COMMANDER"

ENTJ (-A/-T)



"DEBATER"

ENTP (-A/-T)

## Diplomats



"ADVOCATE"

INFJ (-A/-T)

Quiet and mystical, yet very inspiring and tireless idealists.



"MEDIATOR"

INFP (-A/-T)

Poetic, kind and altruistic people, always eager to help a good cause.



"PROTAGONIST"

ENFJ (-A/-T)

Charismatic and inspiring leaders, able to mesmerize their listeners.



"CAMPAIGNER"

ENFP (-A/-T)

Enthusiastic, creative and sociable free spirits, who can always find a reason to smile.



# Carl Jung and Isabel Briggs Myers

## Sentinels



"LOGISTICIAN"

ISTJ (-A/-T)

Practical and fact-minded individuals, whose reliability cannot be doubted.



"DEFENDER"

ISFJ (-A/-T)

Very dedicated and warm protectors, always ready to defend their loved ones.



"EXECUTIVE"

ESTJ (-A/-T)

Excellent administrators, unsurpassed at managing things – or people.



"CONSUL"

ESFJ (-A/-T)

Extraordinarily caring, social and popular people, always eager to help.

## Explorers



"VIRTUOSO"

ISTP (-A/-T)

Bold and practical experimenters, masters of all kinds of tools.



"ADVENTURER"

ISFP (-A/-T)

Flexible and charming artists, always ready to explore and experience something new.



"ENTREPRENEUR"

ESTP (-A/-T)

Smart, energetic and very perceptive people, who truly enjoy living on the edge.



"ENTERTAINER"

ESFP (-A/-T)

Spontaneous, energetic and enthusiastic people – life is never boring around them.

# Carl Jung and Isabel Briggs Myers



**"CAMPAIGNER"**

**ENFP (-A/-T)**

Enthusiastic, creative and sociable free spirits, who can always find a reason to smile.

It doesn't interest me what you do for a living. I want to know what you ache for – and if you dare to dream of meeting your heart's longing. It doesn't interest me how old you are. I want to know if you will risk looking like a fool – for love – for your dreams – for the adventure of being alive.

Oriah Mountain Dreamer

# What kind of thinker are you?

## 6 sombreros para pensar



HECHOS  
Y DATOS



SENTIMIENTOS,  
INTUICIÓN



PELIGROS,  
DIFICULTADES  
Y RIESGOS



BUSCA LADO  
POSITIVO



FACILITADOR



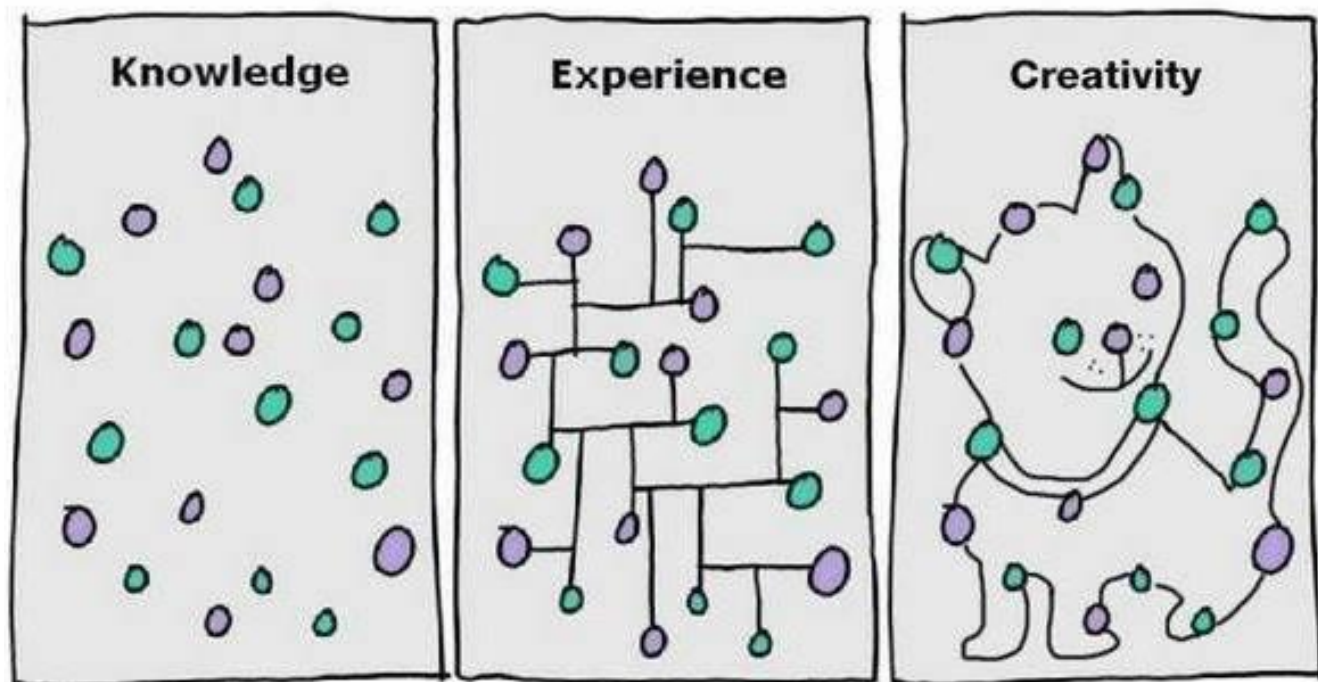
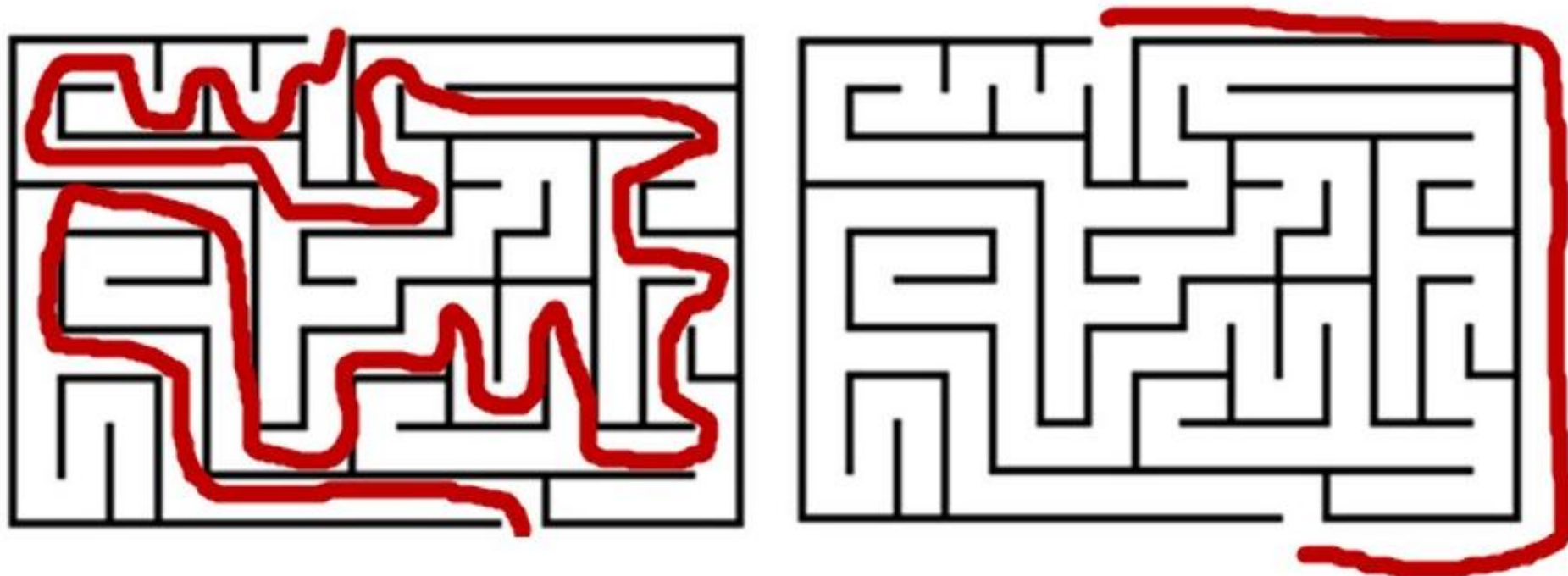
CREATIVIDAD

# What kind of thinker are you?

## Lateral thinking

The need to be right  
all the time is the  
biggest bar to new  
ideas.

*Edward De Bono*





# Political spectrum



## ADVOCATES

*for Self Government*

Planting the seeds of Liberty.

### The World's Smallest Political Quiz

The **ORIGINAL** Internet Political Quiz. Take the Quiz now and find out where you fit on the political map!

#### Personal Issues

Agree

Maybe

Disagree

Government should not censor speech, press, media, or internet.

☐☐☐

Military service should be voluntary. There should be no draft.

☐☐☐

There should be no laws regarding sex for consenting adults.

☐☐☐

Repeal laws prohibiting adult possession and use of drugs.

☐☐☐

There should be no National ID card.

☐☐☐

#### Economic Issues

Agree

Maybe

Disagree

End "corporate welfare." No government handouts to business.

☐☐☐

End government barriers to international free trade.

☐☐☐

Let people control their own retirement; privatize Social Security.

☐☐☐

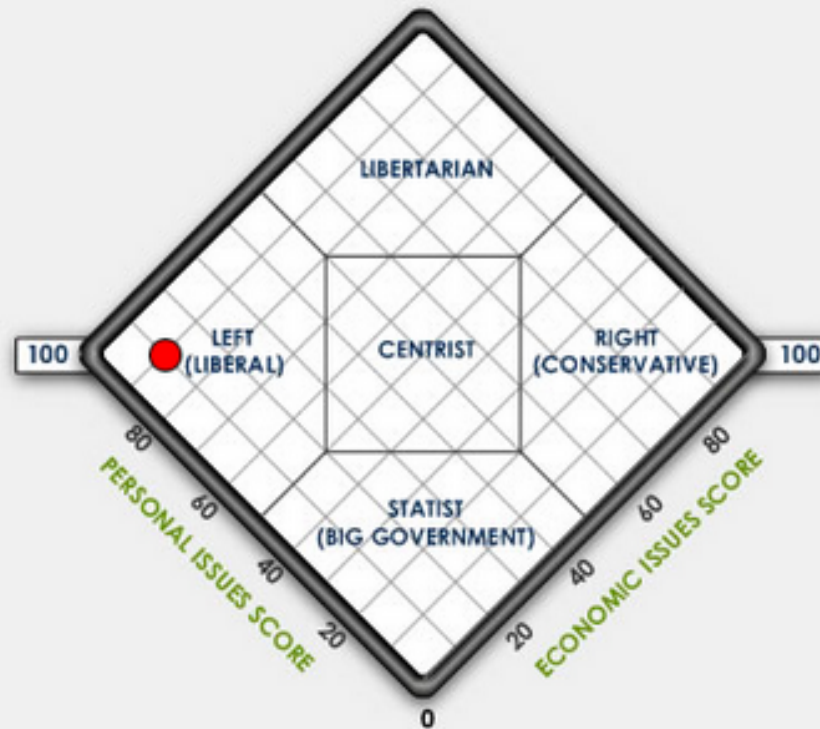
Replace government welfare with private charity.

☐☐☐

Cut taxes and government spending by 50% or more.

☐☐☐

# What kind of thinker are you?



Your **PERSONAL** issues Score is 90%

Your **ECONOMICS** issues Score is 10%

According to your answers, the political group that agrees with you most is...

LEFT (LIBERAL)

Liberals usually embrace freedom of choice in personal matters, but tend to support significant government control of the economy. They generally support a government-funded "safety net" to help the disadvantaged, and advocate strict regulation of business. Liberals tend to favor environmental regulations, defend civil liberties and free expression, support government action to promote equality, and tolerate diverse lifestyles.

Does this sound like a good representation of your views?

# What kind of thinker are you?





# **What kind of thinker are you?**

**“To thy own self be true”**

**– Polonius (Hamlet)**

# Some Activities – Geography

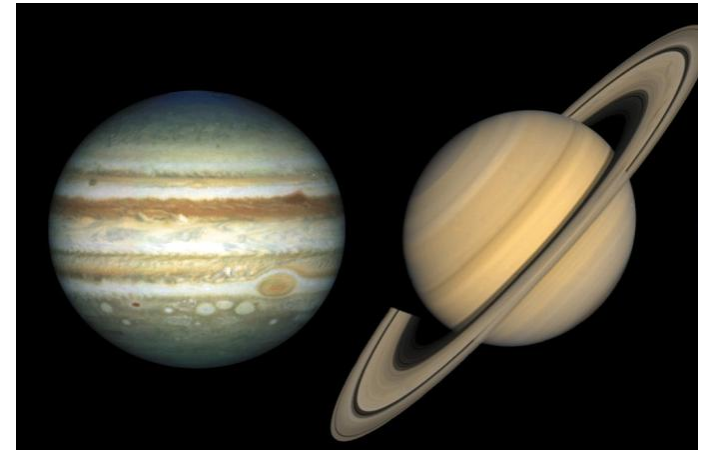
**Go Global / World cities**

**World landmarks**

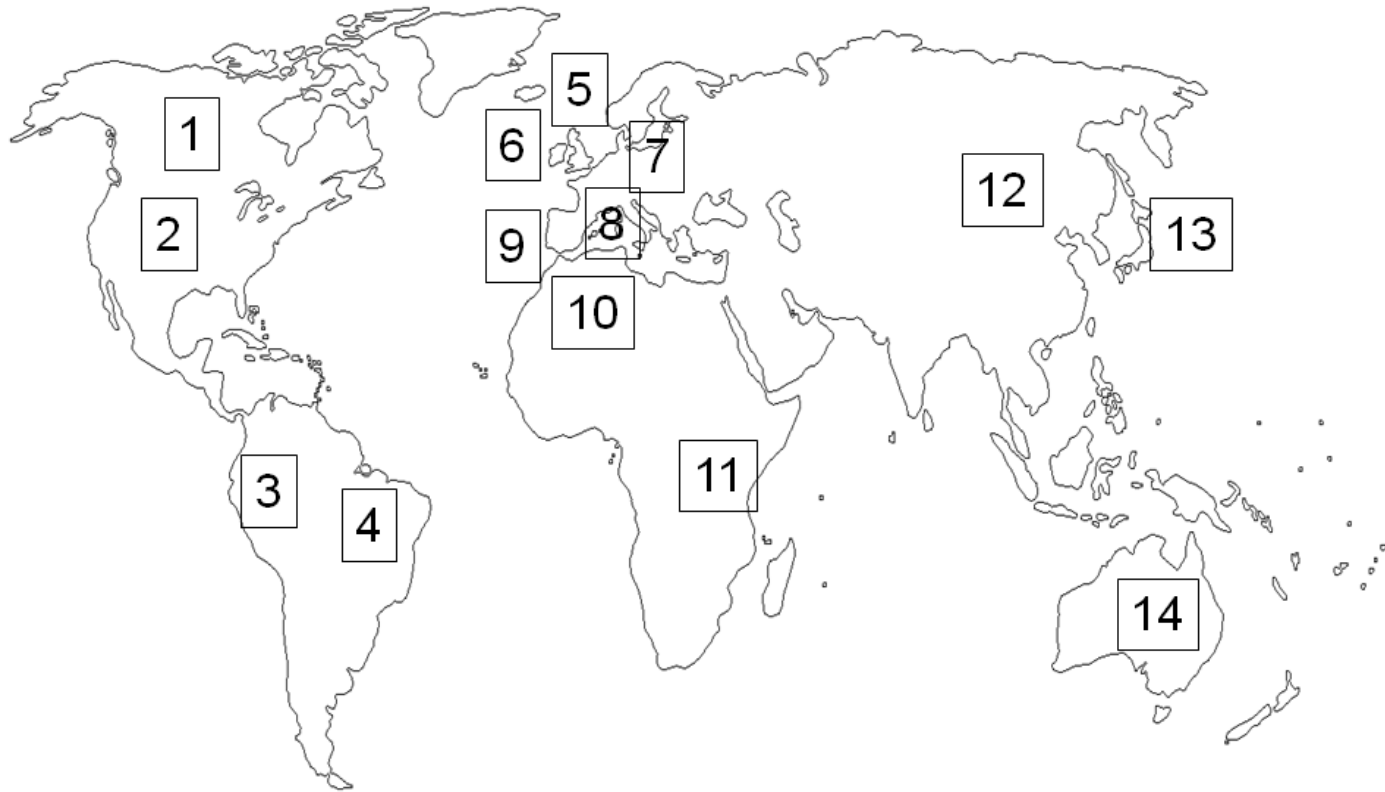


**Country attributes**

**The solar system  
mobile/wall map**

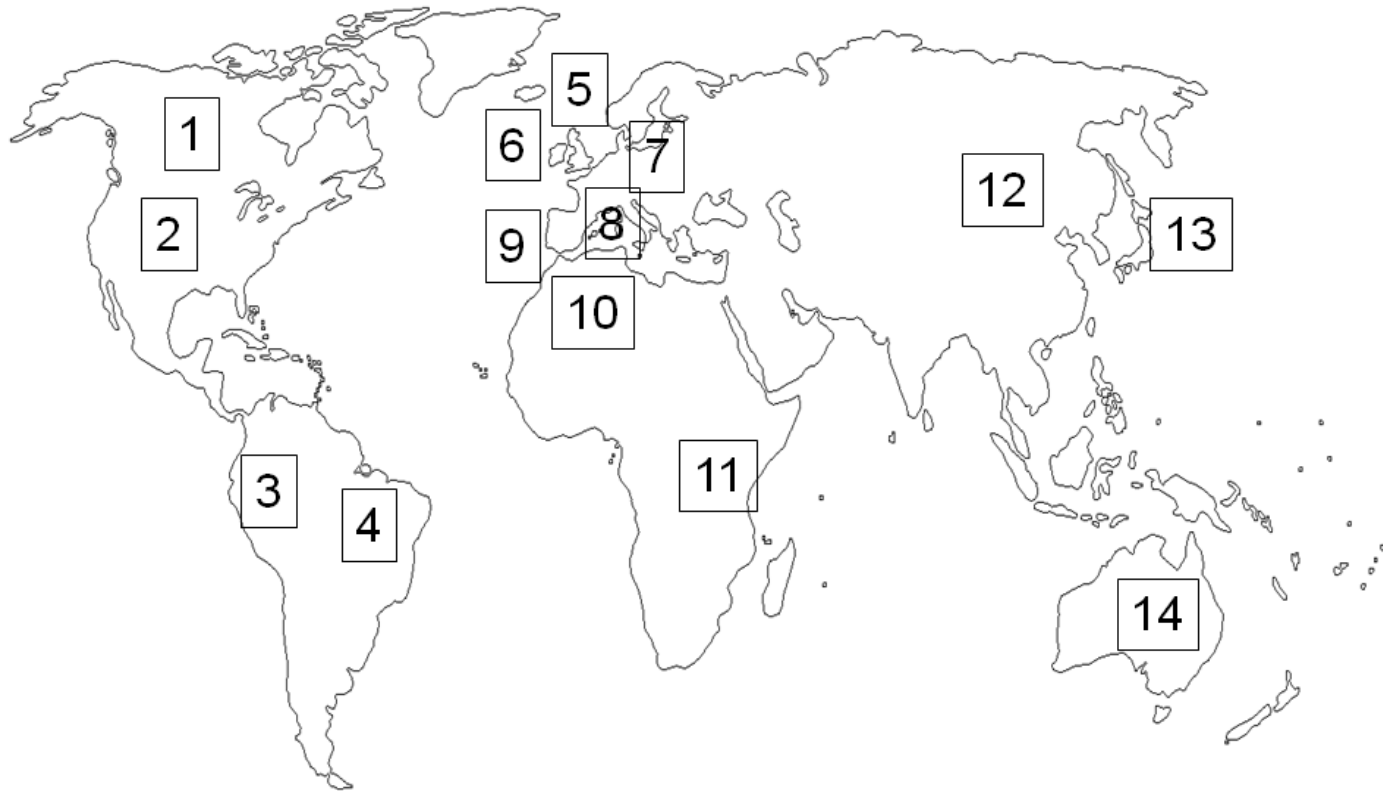


# World Geography



**Learning about our world.** Students answer questions in turn and come to the board to point out each country.

# World Geography



1. **Bonjour!** In Canada they speak French and ...
9. **¡Hola!** How many official languages are there in Spain?

# World Geography

## Exercises

Write six questions and answers, *e.g.*,

What is the capital of ...?

What is the language of ...?

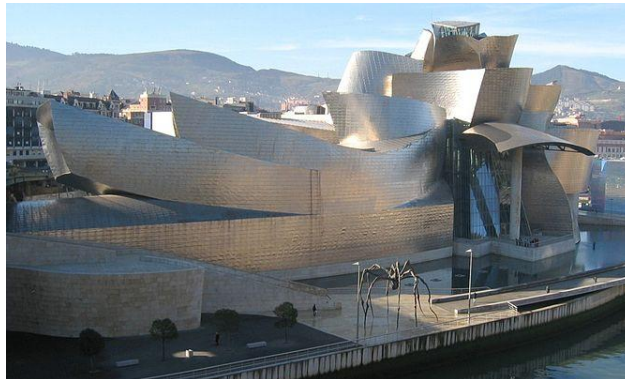
What is the currency of ...?

# World Landmarks

**What is it? Where is it?**

**Do you know a movie about it?**

**Tell me about the movie.**



# **VIRTUAL CITY TOUR**

**What is it? Where is it?**

**Do you know a movie about it?**

**Tell me about the movie.**

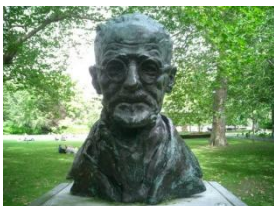
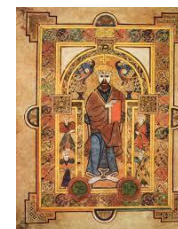


# Countries/National Objects

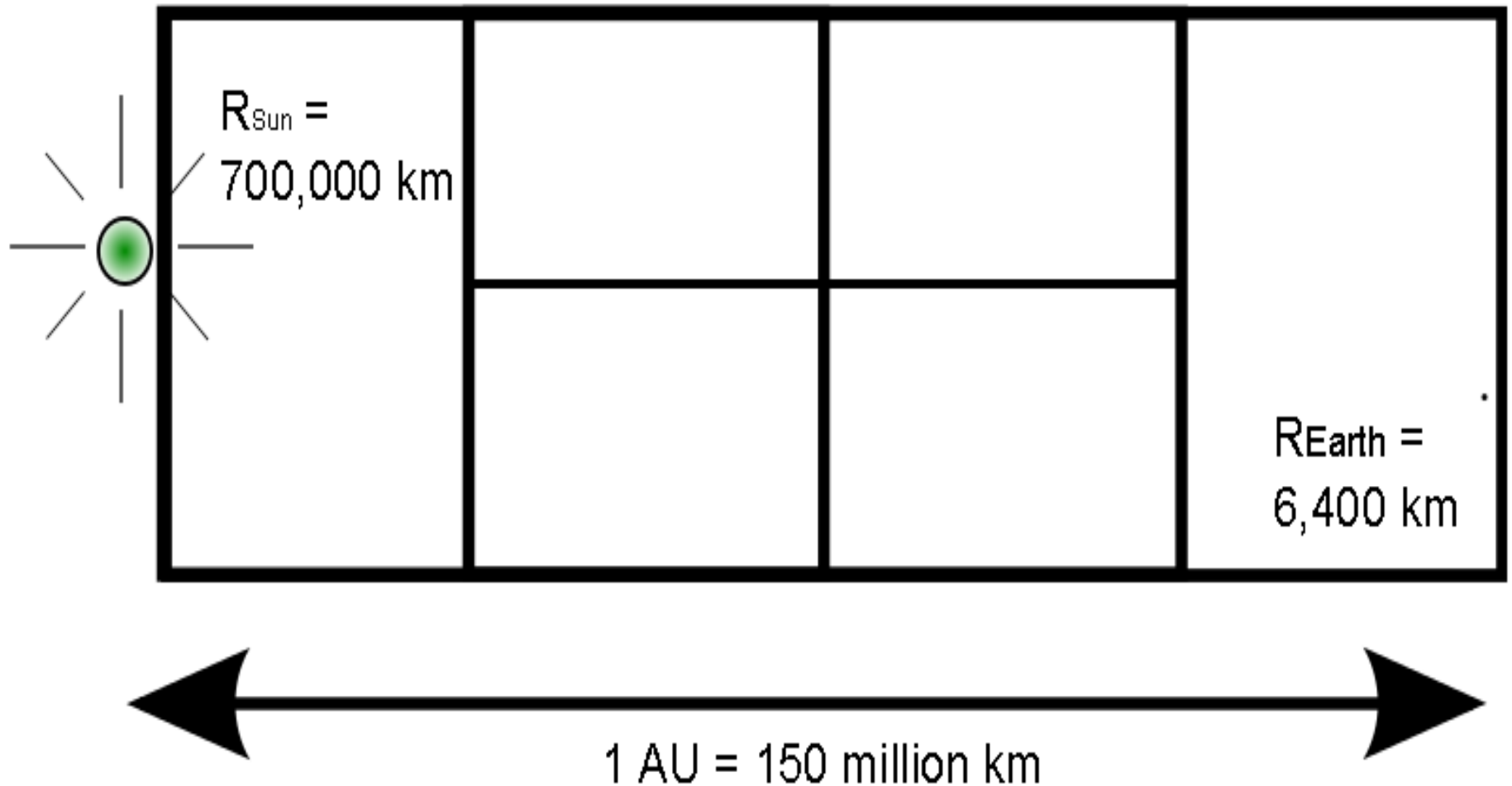
## Organize objects into groups for each country

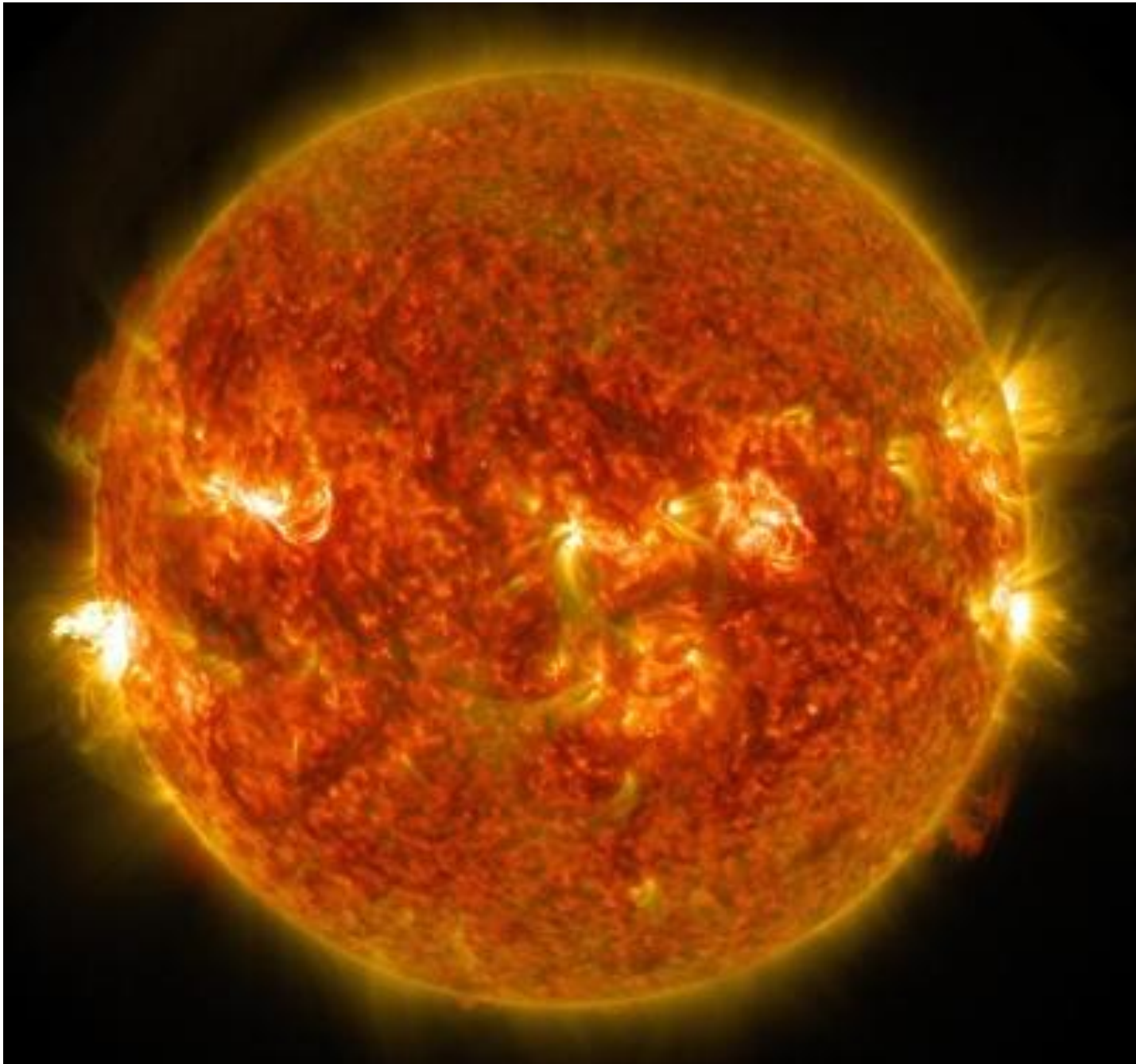
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# Some Activities – The Solar System







# Solar System Wall Chart

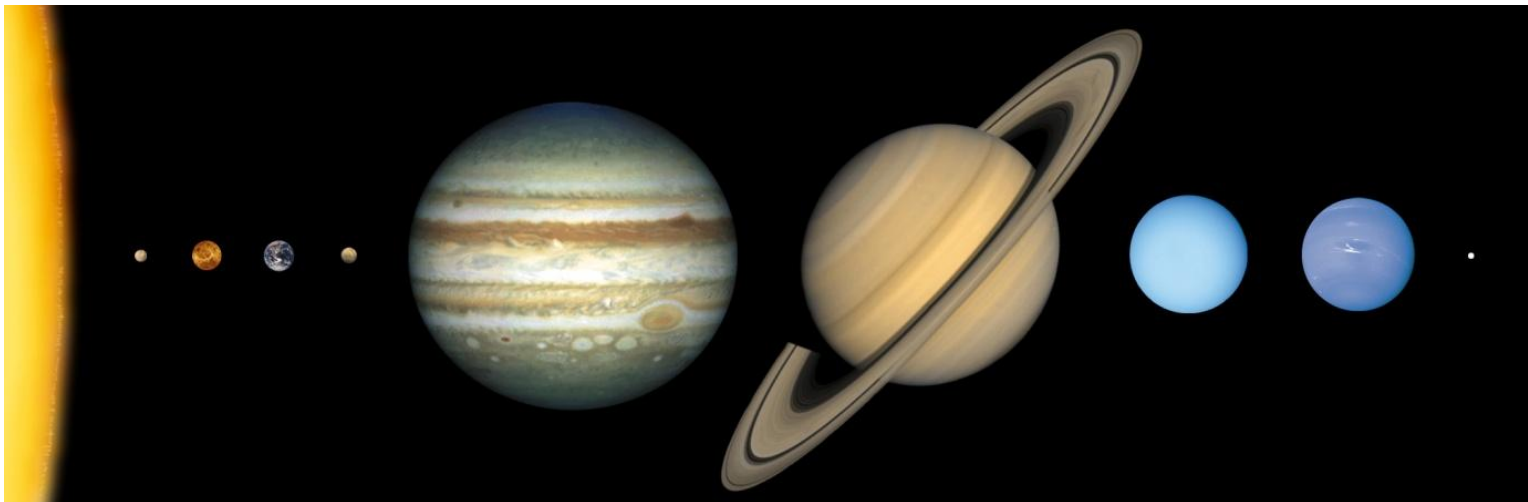
**Level:** 8-12 years **Time:** 30 minutes **Grouping:** Individuals and/or pairs.

**Materials:** A4 paper, ruler, compass, scissors, coloured markers, tape.

**Resources:** Planet table, pre-drawn planet sheet.

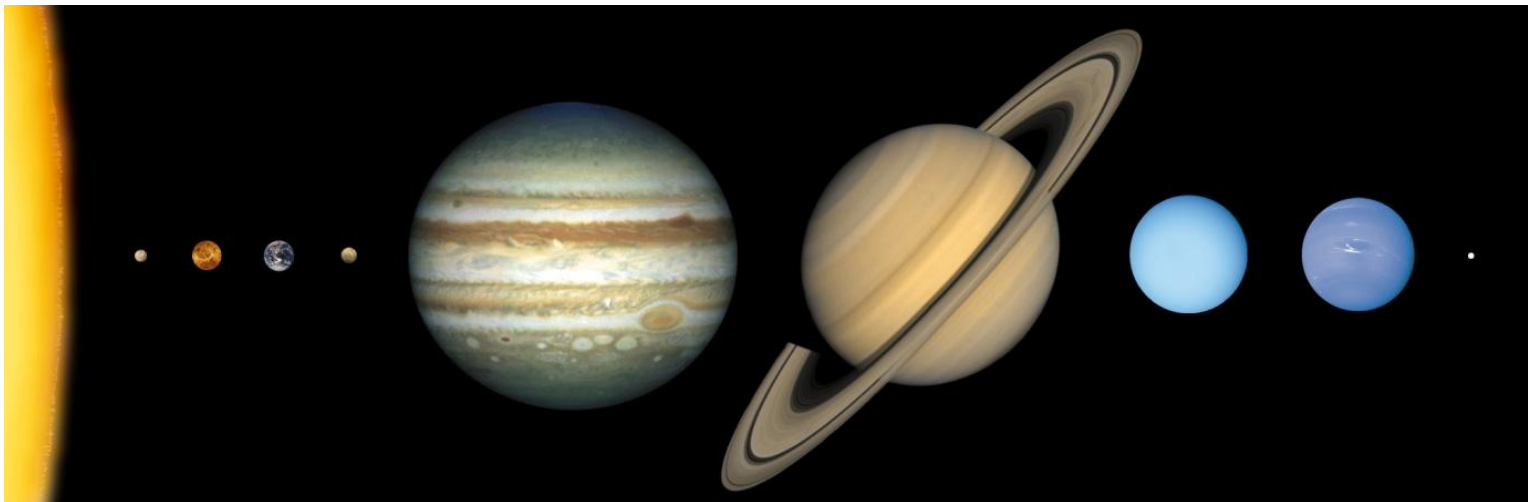
**Vocabulary:** Solar system, planet, radius, diameter, distance, measure, the seasons.

**Learning objectives:** To identify the planets. To understand relative size and distance.



# Solar System Wall Chart

1. Cut out 9 paper circles, each with radius equal to  $R$  in the Planet table. Use a ruler or compass to measure each radius in cm.
2. Colour each circle for each planet as shown.
3. Arrange the 9 planets on the wall in a direction away from the sun, each with distance equal to  $D$  in the Planet table. Use human steps (or hands) to measure the distance. Stick the planets to the wall. You can also use a 1.1-m-radius sun, drawn on the board.



# Solar System Wall Chart

## Planets Table

		R		D
Planet	Radius (x 1000 km)	Relative Radius (earth = 1)	Distance from Sun (x 1000,000 km)	Relative Distance (au)
Mercury	2.5	0.4	58	0.4
Venus	6.0	0.9	110	0.7
Earth	6.5	1.0	150	1.0
Mars	3.4	0.5	230	1.5
Jupiter	70	10.8	780	5.2
Saturn	60	9.2	1430	9.5
Uranus	26	4.0	2870	19.2
Neptune	25	3.8	4500	30.1
Pluto	1.7	0.3	5900	39.4

# Solar System Wall Chart

## Assessment

Which is the largest planet in our solar system? Which is the smallest?

Which planet is closest to the sun? Which is furthest?

Which two planets are closest to earth?

How many times does earth fit into Jupiter?

Why can you only see Venus at sunset or sunrise?

What causes night and day? Can you show with people?

What causes the seasons? Can you show with people?

Why do you think life is possible on earth but not other planets?

## Bibliography

“The Planets -- Investigating Our Planetary Family Tree: A Family Affair,” NASA.

Retrieved from

<https://mobile.arc.nasa.gov/public/iexplore/missions/pages/yss/december.html>

# English with Terri





# **DAY 1 HOMEWORK**

## **– Social Science Article**

- ◎ Pick a Social Science article from a newspaper, magazine, or the internet.
- ◎ State the topic, write a 1-paragraph synopsis, and include a picture with the article.
- ◎ Must have a reference!

# UNIT 1 HOMEWORK – Article

EL PAÍS

PORTADA

INTERNACIONAL

POLÍTICA

IN ENGLISH

► TEMAS DEL DÍA

Detención de una yihadista española

Propuestas electorales

la lucha contra e

ENERGY SECTOR

## Spain breezes into record books as wind power becomes main source of energy

- Sector covered 20.9 percent of total demand last year followed by country's nuclear plants, which met 20.8 percent

EL PAÍS | Madrid | 15 ENE 2014 - 16:15 CET



# UNIT 1 HOMEWORK – Article

**TOPIC Renewable Energy (wind)**

**Spain breezes into record books as wind power becomes main source of energy**

*El País*, January 15, 2014. Retrieved from

[http://elpais.com/elpais/2014/01/15/inenglish/1389798670\\_862500.html](http://elpais.com/elpais/2014/01/15/inenglish/1389798670_862500.html)

**Synopsis:** In 2013, Spain became the first country in the world to use wind as its main source of energy. The Spanish grid supplier REE stated that 21% of its supply came from wind-powered installations. In the year, wind provided 54,000 GWhr, an increase of 13% over the previous year.

- Sector covered 20.9 percent of total demand last year followed by country's nuclear plants, which met 20.8 percent



# Reading / Bibliography

- [BBC Bitesize](#): Simple-to-follow lessons and videos for pupils aged 4 to 14
- [English Primary Schoolchildren's Definitions of Geography](#), Simon Catling, Westminster Institute of Education, Oxford Brookes University, 2001.
- [World Geography Games](#): Countries, capitals, flags, ...
- [Winter Shuffle 2013: 'Sunshine' Q&A with Danny Boyle, Mark Kermode and Brian Cox](#) (A conversation between an artist and a scientist).