



## E-SOC Lesson Plan

# Equality in Science, Technology, Engineering, Art and Mathematics on the Cloud

### STATEMENT:

There are not enough successful examples of females in careers like  
engineering, science research, and STEAM professions

Learning Objectives:

Create student awareness of stereotypes.

Learning Outcomes:

By concluding this session/class participants  
will have:

**Knowledge:**

**Concrete facts about contribution of women to  
higher positions in science and politics**

**Skills:**

**Strengthen personal skills to debate in favor of  
women, breaking gender bias**

**Attitudes:**

**Strengthen women confidence in general and  
in job perspective in particular**

Target group:

Secondary school Student and their  
Teachers

<b>Activity Title &amp; number</b>	<b>Short description of the activity</b>	<b>Resources needed</b>	<b>Time</b>
<b>Lead In:</b> <b>1. Biases in women jobs</b>	Interactive discussion focused on biases around women in jobs, notably stereotypes and jobs in management, politics and science	not applicable (white board)	1 hour in total  5 - 10 mins
<b>2. Game play</b>	Play Goose Game with questions related to the topic: facts about women in jobs/positions	Game board Game cards	30-40 mins
<b>3. Discussion and conclusions</b>	Discuss whether or not biases have been changed and in which way	not applicable (white board)	5-10 mins
<b>5. Follow-up</b>	Research on women in biased jobs for men		

#### ANNEXES:

- GAME Board – game rules on the back
- GAME cards – QUESTIONS, ANSWERS and GAME PLAY  
(includes empty cards to expand on demand)

Not included : GOOSES (colored fiches can be used instead)

- LIST OF QUESTIONS with SOURCES

How many women  
serve on the  
European Commission  
(2019-2024)

-----

Women: 12 (48%)

Man: 13 (52%)

---([link](#))---

Fully Correct: +2

Almost Correct: +1

Roughly correct (40-60%): 0

Wrong: -2

How many women are  
in the European  
Parliament  
(2019-2024)

-----

Women: (39.3%)

Man: (60.7%)

---([link](#))---

Fully Correct (39%): +4

Almost Correct(38-41%): +2

Roughly correct (35-44%): 0

Wrong: -1

How many women were  
in the European  
Parliament (1979-1984)

-----

Women: 15.2 %)

Man: 84.8 %

---([link](#))---

Fully Correct (15%): +6

Almost Correct (12.5-17.5%):

+3

Roughly correct (10-20%): 0

Wrong: -1

How many women have  
been president of the  
European Commission  
(2022)

-----

Women: 1 (7%)

Man: 13 (93%)

(2022 – Ursula von der Leyen)

---([link](#))---

Correct (1 - 7%): +3

Wrong: -1

How many women have  
been president of the  
United States (2022)

-----

Women: 0 (0%)

Man: 46 (100%)

(2022 – Joe Biden)

---([link](#))---

Correct (0 - 100%): +2

Wrong: -1

How many women have  
been prime minister of  
the UK (2022)

-----

Women: 3 (4%/6%)

Man: 76 (of which 12 twice or

more, i.e. 64) (96%/94%)

(2022 – Rishi Sunak)

---([link](#))---

Fully Correct (3-5%): +3

Almost Correct(2-6%): +1

Wrong: -1

Since when are women  
allowed to vote in the  
US

-----

1920

---([link](#))---

Fully Correct: +4

Almost Correct (1918-1922):

+1

Wrong: -1

Since when are women  
allowed to vote in the  
your home country

-----

see source (Internet)

---([link](#))---

Fully Correct: +4

Almost Correct (+ or – 5 years):

+2

Wrong: -1

Since when are women  
allowed to vote in  
France

-----

1944

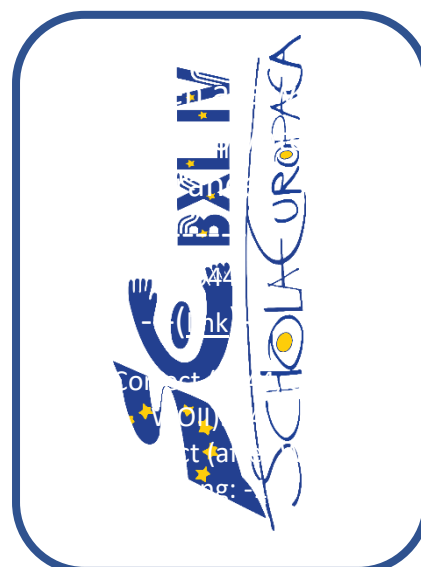
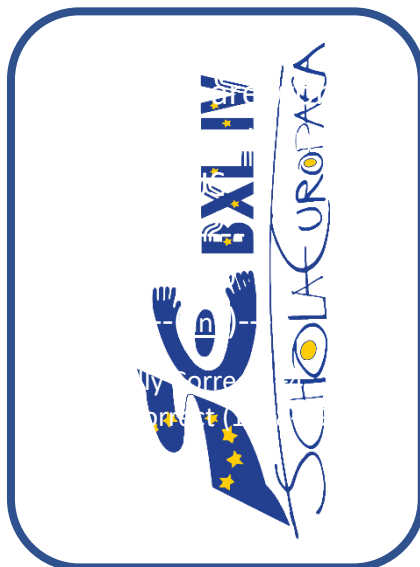
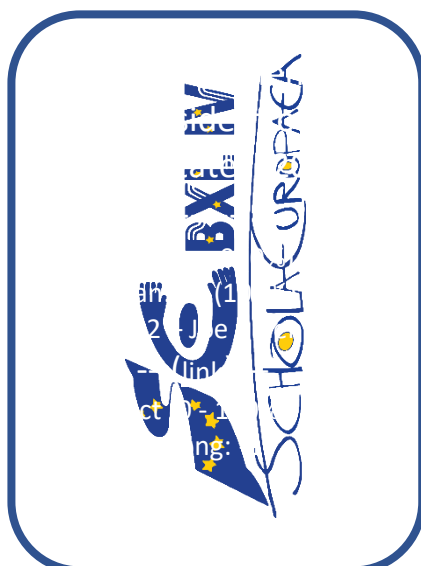
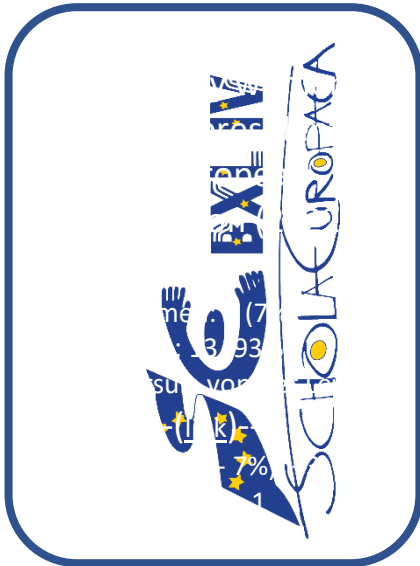
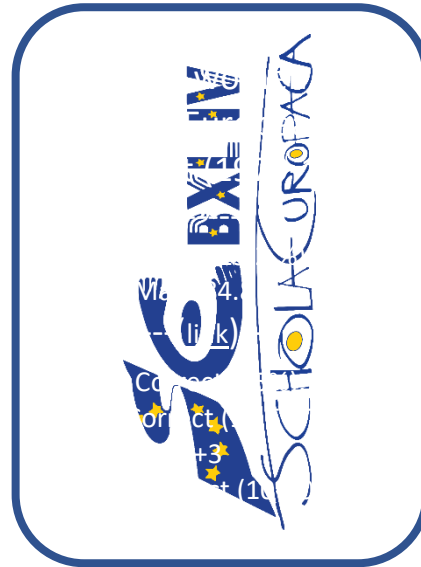
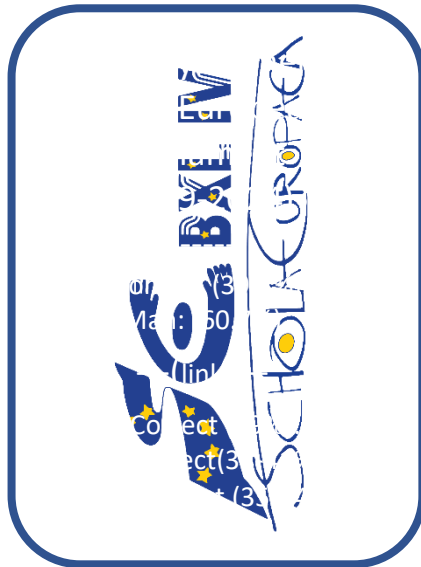
---([link](#))---

Fully Correct (1944, end of

WII): +4

Almost Correct (after WII): +1

Wrong: -1



In which country were  
women allowed to vote  
first  
(Parliament, not local)

-----  
New Zealand

---([link](#))---

Correct: +2  
Wrong: -1

What is the mean  
difference in income  
between man and  
women in the EU (2022)

-----  
13%

---([link](#))---

Fully Correct (13%): +4  
Almost Correct(+ or - 2%): +2  
Roughly correct (+ or - 4%): +1  
Wrong: -1

What is the mean  
difference in income  
between man and  
women in the EU (2022)

-----  
see source

---([link](#))---

Fully Correct (exact%): +3  
Almost Correct(+ or - 1%): +1  
Roughly correct (+ or - 2%): 0  
Wrong: -1

What is the percentage  
of women that serve as  
flight attendant (in the  
US, 2022)

-----  
Women (84%)  
Men (16%) get paid 10% more

---([link](#))---

Fully Correct (exact%): +3  
Almost Correct(+ or - 5%): +2  
Nearly correct (+ or - 10%): +1  
Above 75%: 0  
Wrong: -1

What is the percentage  
of women that serve as  
pilot (in the US, 2022)

-----  
Women (2%)  
Men (98%)

---([link](#))---

Fully Correct (exact%): +4  
Almost Correct(below 5%): +2  
Nearly correct (below 10%): +1  
Below 20%: 0  
Wrong: -1

How many women have  
been an astronaut  
(Oct. 2022)

-----  
Women  
(75 [2022], 12% [2019])  
Men (82%)

---([link](#))---

Fully Correct (75, 12%): +5  
Almost Correct  
(70-80 or 10-15%): +3  
Nearly correct  
(60-100, 10-20%): +1  
Wrong: -1

What percentage of  
women serve in the  
Executive Staff of a  
company  
(across the world)

-----  
Women (23%)  
Men (77%)

---([link](#))---

Fully Correct (21-25%): +4  
Almost Correct(20- 26%): +2  
Nearly correct (<25%): +1  
Wrong: -1

How many women  
received a Nobel Prize  
in Science, Physics,  
Chemistry, Medicine  
(2022)

-----  
Women (24, 4%)  
Men (637, 96%)

---([link](#))---

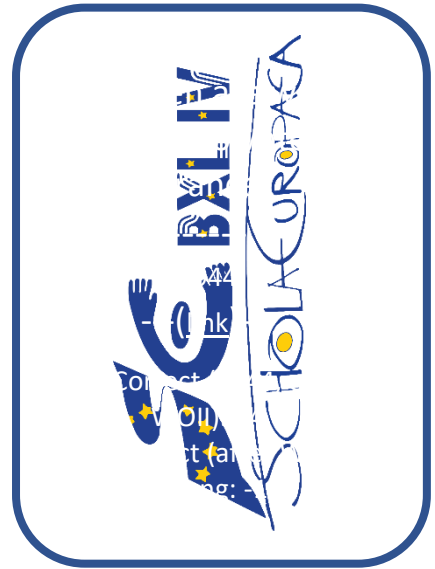
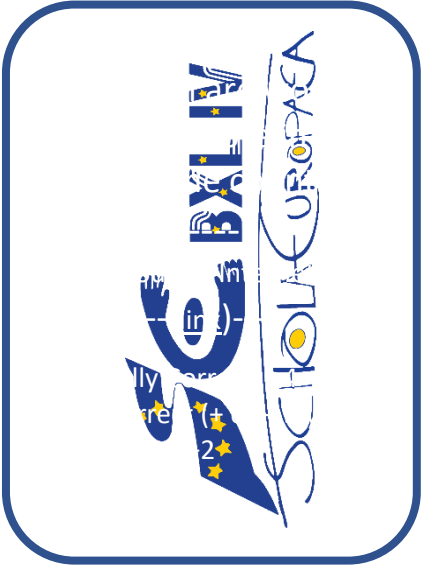
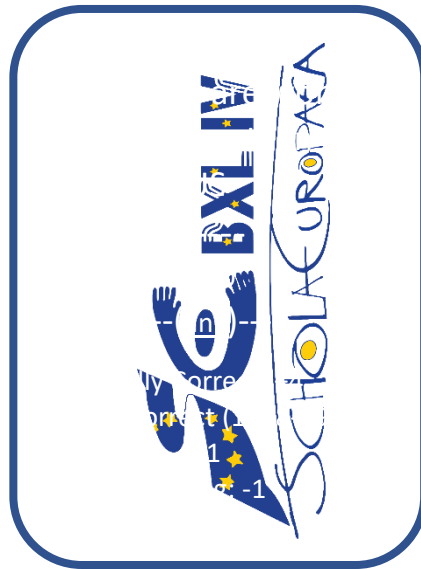
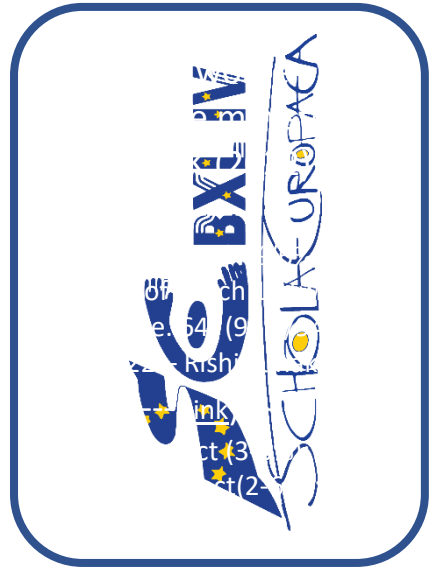
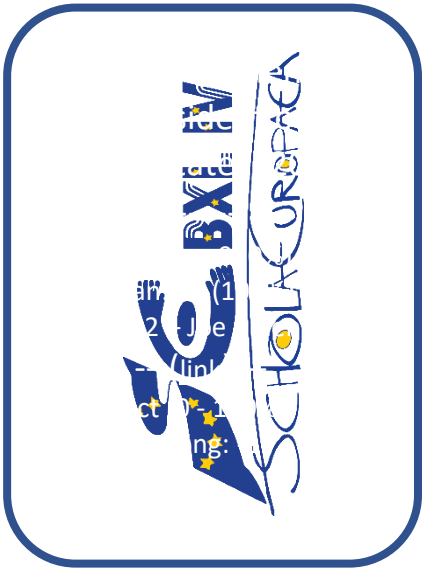
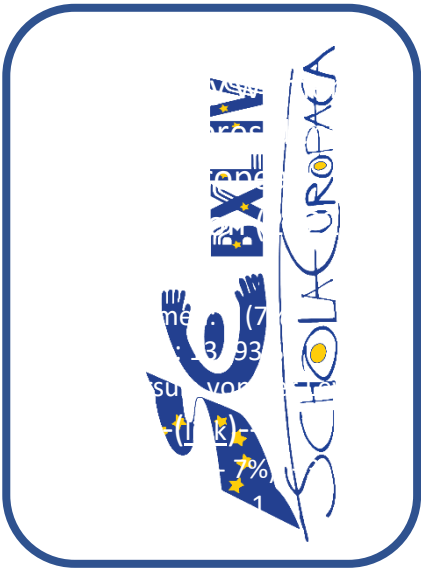
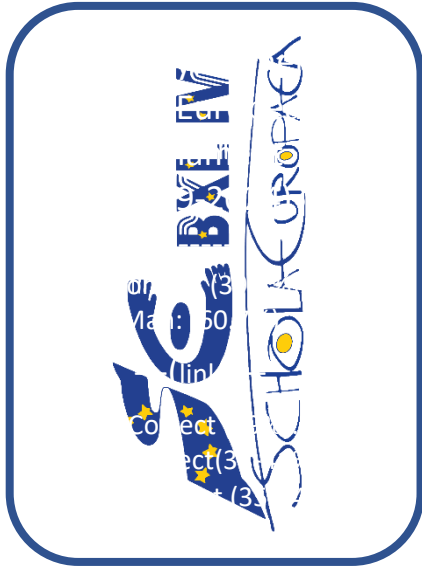
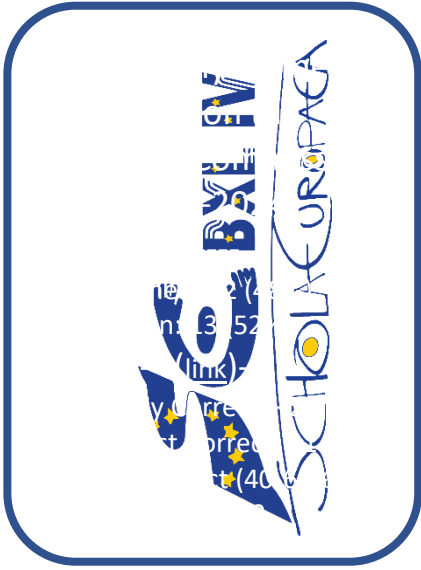
Fully Correct (24, 4%): +5  
Almost Correct(2-6%): +3  
Nearly correct (<10%): +1  
Wrong: -1

Is more or less than 50%  
medical students female

-----  
More  
(> 60-70% in The Netherlands)

---([link](#))---

Correct: +1  
Wrong: -1





**E-SOC - KA220 - Erasmus+ project team - EEB4 - Brussels**



Funded by the  
Erasmus+ Programme  
of the European Union

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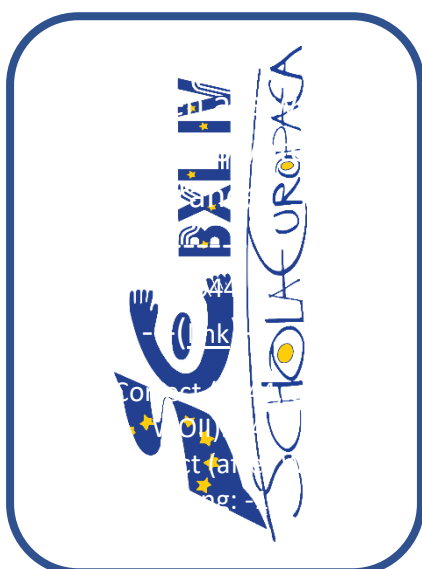
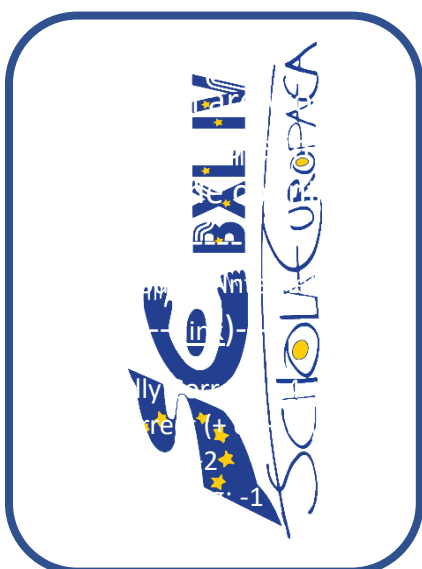
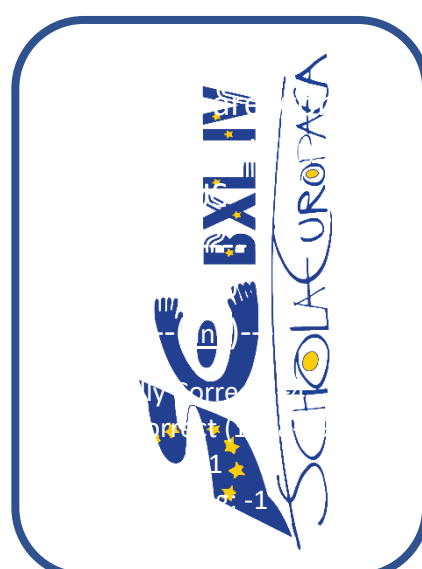
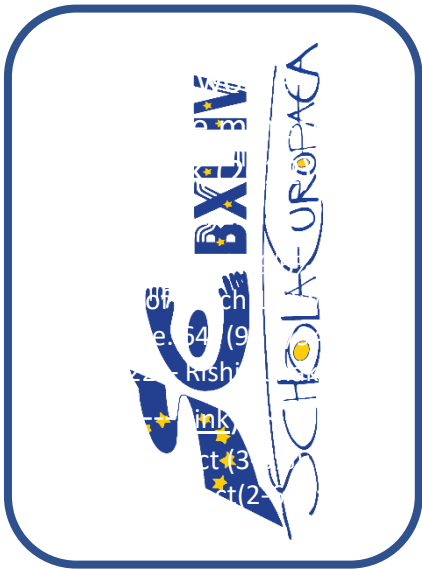
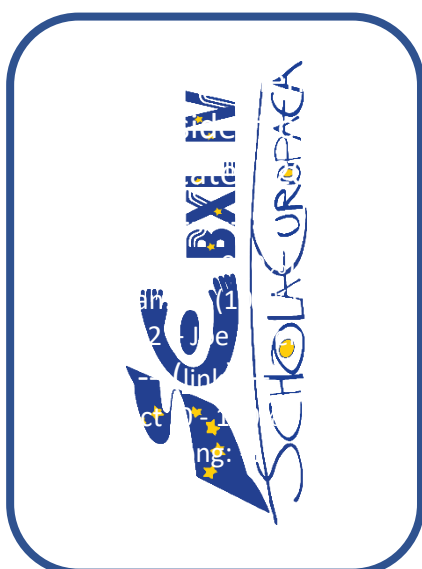
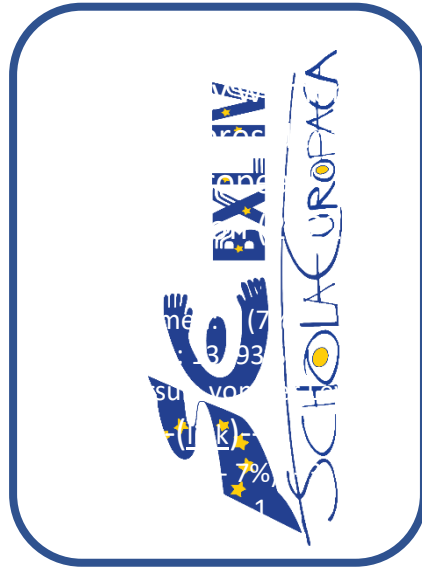
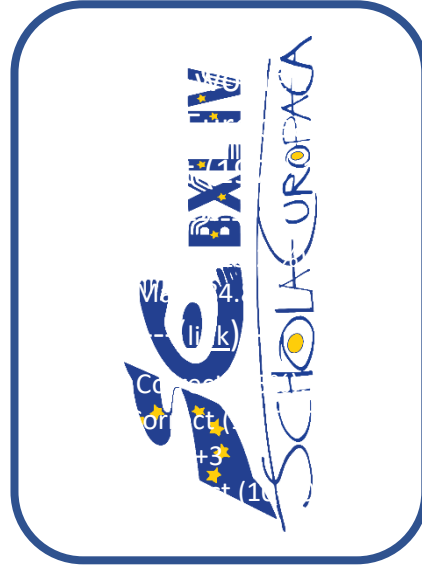
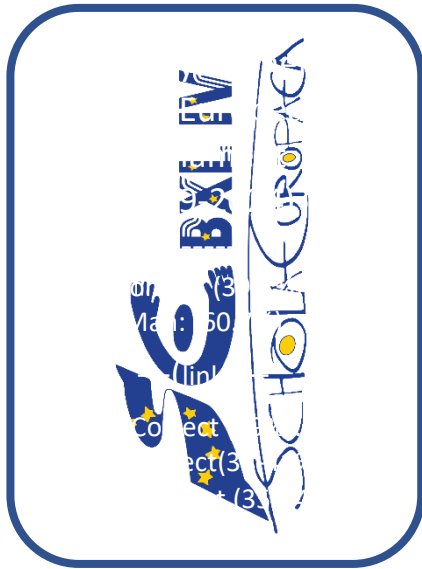
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### How to play:

The person on your left takes a card from the stack. That person reads the question. If your answer is correct you can move your goose. If your answer is incorrect you may have to move backwards. The person who asked the question is next.

If you arrive on a goose (5 , 9 , 14 etc.) you replicate your move (forwards or backwards).

Special fields see below.

#	name	To DO
6	bridge	Go to 12
19	tavern	Skip a turn
31	well	Whoever comes here must stay there until another player gets there. The one who was there first then plays on.
42	labyrinth	Return to 37
52	jail	Same as 31
58	death	Start again
63	finish	Whoever arrives here first is the winner

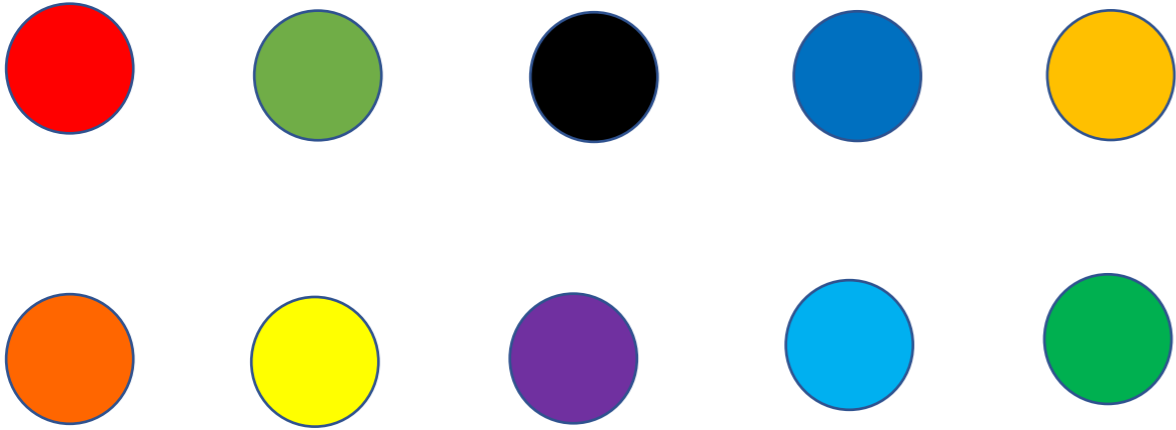


E-SOC - KA220 - Erasmus+ project team - EEB4 - Brussels



Funded by the Erasmus+ Programme of the European Union

FICHES





Question	Answer	Game Play	Source
How many women serve on the European Commission (2019-2024)	Women: 12 (48%) Man: 13 (52%)	Fully Correct: +2 Almost Correct: +1 Roughly correct (40-60%): 0 Wrong: -2	<a href="https://ec.europa.eu/commission/commissioners/2019-2024_nl">https://ec.europa.eu/commission/commissioners/2019-2024_nl</a>
How many women have are in the European Parliament (2019-2024)	Women: (39.3%) Man: (60.7%)	Fully Correct (39%): +4 Almost Correct(38-41%): +2 Roughly correct (35-44%): 0 Wrong: -1	<a href="https://www.europarl.europa.eu/news/en/headlines/society/20190226STO28804/women-in-the-european-parliament-infographics">https://www.europarl.europa.eu/news/en/headlines/society/20190226STO28804/women-in-the-european-parliament-infographics</a>
How many women were in the European Parliament (1979-1984)	Women: (15.2%) Man: (84.8%)	Fully Correct (15%): +6 Almost Correct(12.5%-17.5%): +3 Roughly correct (10%-20%): 0 Wrong: -1	<a href="https://www.europarl.europa.eu/news/en/headlines/society/20190226STO28804/women-in-the-european-parliament-infographics">https://www.europarl.europa.eu/news/en/headlines/society/20190226STO28804/women-in-the-european-parliament-infographics</a>
How many women have been president of the United States (2022)	Women: 0 (0%) Man: 46 (100%) (2022 – Joe Biden)	Correct (0 - 100%): +2 Wrong: -1	<a href="https://www.whitehouse.gov/about-the-white-house/presidents/">https://www.whitehouse.gov/about-the-white-house/presidents/</a> <a href="https://en.wikipedia.org/wiki/List_of_presidents_of_the_United_States">https://en.wikipedia.org/wiki/List_of_presidents_of_the_United_States</a>
How many women have been prime minister of the United Kingdom (2022)	Women: 3 (4%/6%) Man: 76 (of which 12 twice or more, i.e. 64) (96%/94%) (2022 – Rishi Sunak)	Fully Correct (3-5%): +3 Almost Correct(2-6%): +1 Wrong: -1	<a href="https://en.wikipedia.org/wiki/List_of_prime_ministers_of_the_United_Kingdom">https://en.wikipedia.org/wiki/List_of_prime_ministers_of_the_United_Kingdom</a>
How many women have been president of the European Commission (2022)	Women: 1 (7%) Man: 13 (93%) (2022 – Ursula von der Leyen)	Correct (1, 7%): +2 Wrong: -1	<a href="https://en.wikipedia.org/wiki/President_of_the_European_Commission">https://en.wikipedia.org/wiki/President_of_the_European_Commission</a>
Since when are women allowed to vote in the US	1920	Fully Correct: +2 Almost Correct (1918-1922): +1 Wrong: -1	<a href="https://en.wikipedia.org/wiki/Women%27s_suffrage">https://en.wikipedia.org/wiki/Women%27s_suffrage</a> <a href="https://nl.wikipedia.org/wiki/Vrouwenkiesrecht">https://nl.wikipedia.org/wiki/Vrouwenkiesrecht</a> (NL)
Since when are women allowed to vote in the your home country	see source	Fully Correct: +4 Almost Correct (+ or – 5 years): +2 Wrong: -1	<a href="https://en.wikipedia.org/wiki/Women%27s_suffrage">https://en.wikipedia.org/wiki/Women%27s_suffrage</a> <a href="https://nl.wikipedia.org/wiki/Vrouwenkiesrecht">https://nl.wikipedia.org/wiki/Vrouwenkiesrecht</a> (NL)
Since when are women allowed to vote in France	1944	Fully Correct (1944, end of WOII): +4 Almost Correct (after WOII): +1 Wrong: -1	<a href="https://en.wikipedia.org/wiki/Women%27s_suffrage">https://en.wikipedia.org/wiki/Women%27s_suffrage</a> <a href="https://nl.wikipedia.org/wiki/Vrouwenkiesrecht">https://nl.wikipedia.org/wiki/Vrouwenkiesrecht</a> (NL)
In which country were women allowed to vote first (Parliament, not local)	New Zealand	Correct: +2 Wrong: -1	<a href="https://en.wikipedia.org/wiki/Women%27s_suffrage">https://en.wikipedia.org/wiki/Women%27s_suffrage</a> <a href="https://nl.wikipedia.org/wiki/Vrouwenkiesrecht">https://nl.wikipedia.org/wiki/Vrouwenkiesrecht</a> (NL)
What is the mean difference in income between man and women in the EU (2022)	13%	Fully Correct (13%): +4 Almost Correct(+ or - 2%): +2 Roughly correct (+ or - 4%): +1 Wrong: -1	The gender pay gap <u>varies widely</u> across the EU: Latvia has the largest pay gap with 22.3%, followed by Estonia (21.1%), Austria (18.9%), Germany (18.3%) and Hungary (17.2%). By contrast, Luxembourg (0.7%), Romania (2.4%), Slovenia (3.1%), Italy (4.2%) and Poland (4.5%) had the smallest gender pay gap in 2020. <a href="https://www.europarl.europa.eu/news/en/headlines/society/20200227STO73519/gender-pay-gap-in-europe-facts-and-figures-infographic">https://www.europarl.europa.eu/news/en/headlines/society/20200227STO73519/gender-pay-gap-in-europe-facts-and-figures-infographic</a>
What is the difference in income between man and women in your home country (2022)	see source	Fully Correct (exact%): +3 Almost Correct(+ or - 1%): +1 Roughly correct (+ or - 2%): 0 Wrong: -1	The gender pay gap <u>varies widely</u> across the EU: Latvia has the largest pay gap with 22.3%, followed by Estonia (21.1%), Austria (18.9%), Germany (18.3%) and Hungary (17.2%). By contrast, Luxembourg (0.7%), Romania (2.4%), Slovenia (3.1%), Italy (4.2%) and Poland (4.5%) had the smallest gender pay gap in 2020. <a href="https://www.europarl.europa.eu/news/en/headlines/society/20200227STO73519/gender-pay-gap-in-europe-facts-and-figures-infographic">https://www.europarl.europa.eu/news/en/headlines/society/20200227STO73519/gender-pay-gap-in-europe-facts-and-figures-infographic</a>
What is the percentage of women that serve as flight attendant (in the US, 2022)	Women (84%) Men (16%)	Fully Correct (exact%): +3 Almost Correct(+ or - 5%): +2 Nearly correct (+ or - 10%): +1 Above 75%: 0	<a href="https://www.zippia.com/airline-flight-attendant-jobs/demographics/">https://www.zippia.com/airline-flight-attendant-jobs/demographics/</a> But men get paid roughly 10% more.



		Wrong: -1	
What is the percentage of women that serve as pilot (in the US, 2022)	Women (2%) Men (98%)	Fully Correct (exact%): +4 Almost Correct(below 5%): +2 Nearly correct (below 10%): +1 Below 20%: 0 Wrong: -1	<a href="https://www.zippia.com/in-flight-crew-member-jobs/demographics/">https://www.zippia.com/in-flight-crew-member-jobs/demographics/</a>
How many women have been an astronaut (Oct. 2022)	Women (75 [2022], 12% [2019]) Men (82%)	Fully Correct (75, 12%): +5 Almost Correct(70-80 or 10-15%): +3 Nearly correct (60-100, 10-20%): +1 Wrong: -1	<a href="https://en.wikipedia.org/wiki/List_of_female_astronauts#:~:text=Female%20astronauts%20went%20on%20to,73%20women%20with%20completed%20spaceflights">https://en.wikipedia.org/wiki/List_of_female_astronauts#:~:text=Female%20astronauts%20went%20on%20to,73%20women%20with%20completed%20spaceflights</a>
What percentage of women serve in the Executive Staff of a company (across the world)	23%	Fully Correct (21-25%): +4 Almost Correct(20- 26%): +2 Nearly correct (<25%): +1 Wrong: -1	<a href="https://www.catalyst.org/research/women-in-management/">https://www.catalyst.org/research/women-in-management/</a>
How many women received a Nobel Prize in Science, Physics, Chemistry, Medicine (2022)	24 (24/637=4%)	Fully Correct (24, 4%): +5 Almost Correct(2-6%): +3 Nearly correct (<10%): +1 Wrong: -1	<a href="https://en.wikipedia.org/wiki/List_of_female_Nobel_laureates#:~:text=The%20most%20recent%20women%20to,Emmanuelle%20Charpentier%20and%20Jennifer%20A">https://en.wikipedia.org/wiki/List_of_female_Nobel_laureates#:~:text=The%20most%20recent%20women%20to,Emmanuelle%20Charpentier%20and%20Jennifer%20A</a>
Is more or less than 50% medical students female	More	Correct: +1 Wrong: -1	<a href="https://www.aamc.org/news-insights/press-releases/majority-us-medical-students-are-women-new-data-show">https://www.aamc.org/news-insights/press-releases/majority-us-medical-students-are-women-new-data-show</a> Note: In the NL 60-70% of the medical students is female)
What is the percentage of female teachers in primary education			
What is the percentage of female teachers in secondary education			
What is the percentage of professors in Universities			