



SCIENCE IS FUN. PROPERTIES OF THE AIR

Age category 9-12 YEARS

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Competences

- *The students will understand that the air has a smaller density than water and that this specific feature makes some objects flow.*
- *The students will know that the orange with the peel on and the apple are floating because they have in their composition a larger quantity of air.*
- *The students are encouraged to experiment the laws of physics.*

Competences according to European curriculum:

<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM%3Ac11090>

Formative assessment:

- *Drawing the contour of the fruit.*
- *Identifying floating objects.*
- *Arranging the steps of the experiment in the right order*
- *Making the correspondence image-word, image-object*

Summative Assessment:

- *Some objects flow because of a specific feature of the air*

Specific vocabulary list/Keywords:

- **feature**
- **air bubbles**
- **experiment**
- **density**
- **science/physics**





Short description of the educational context/scenario:

The students will watch the video with the experiment where the whole orange is floating and the peeled orange is sinking. The students will guess the property to flow of the fruits because of the large content of water or air bubbles.

Smaller students will colour, name and draw according to numbers the two fruit from the experiment. The floating objects will be selected. Then the needed objects will be selected. The students will make associations between images and the written words. The sentences that reflect the experiment will be signed and read.

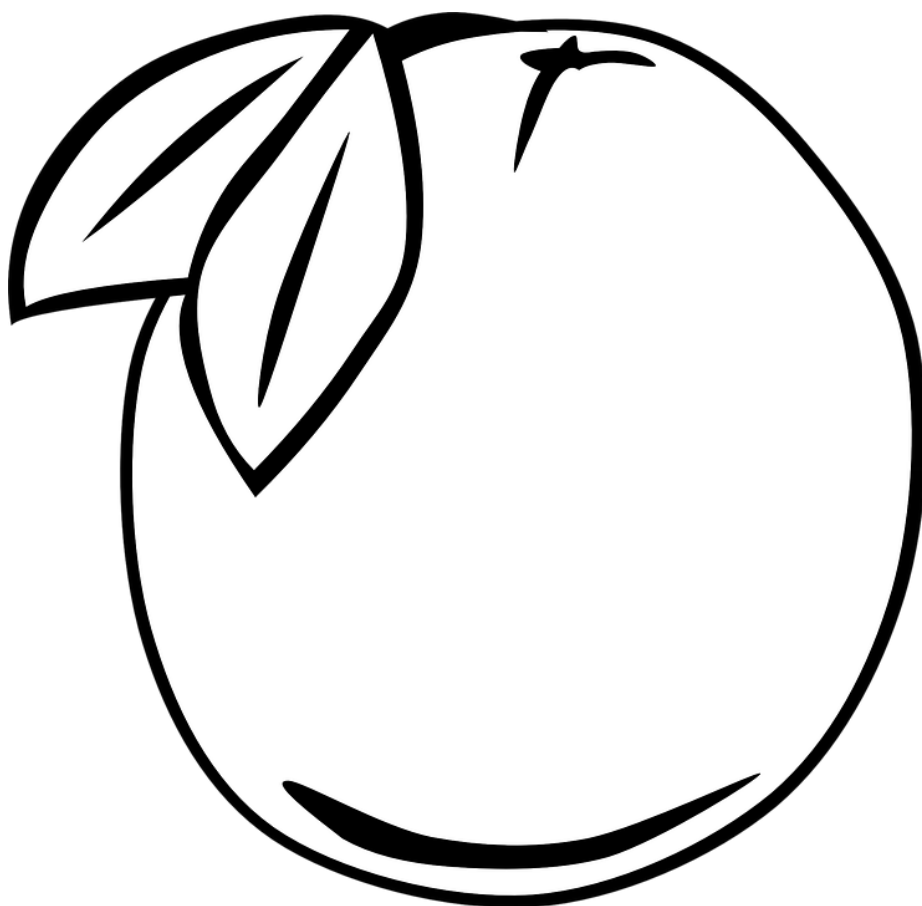
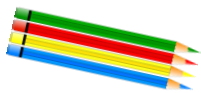
Materials needed/Technical requirements:

- transparent recipients, water, oranges, apple, coloured pencils.



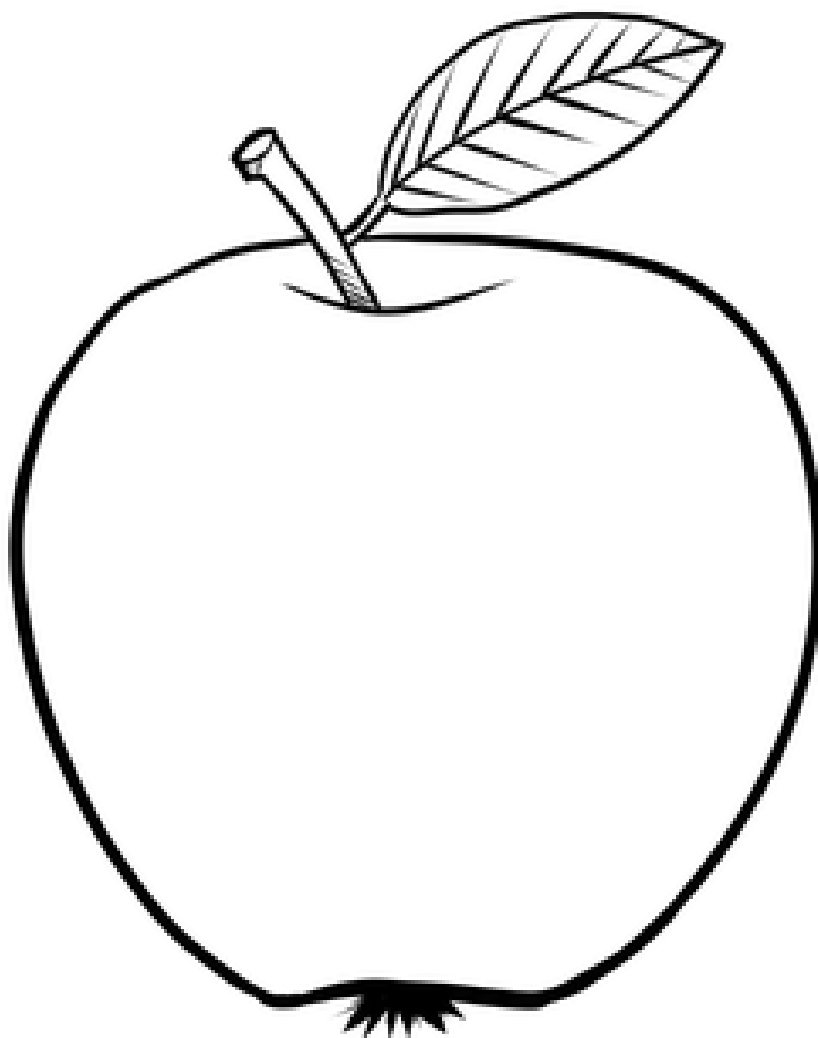


1. Colour the fruit .



ORANGE



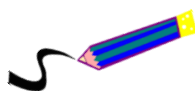


APPLE

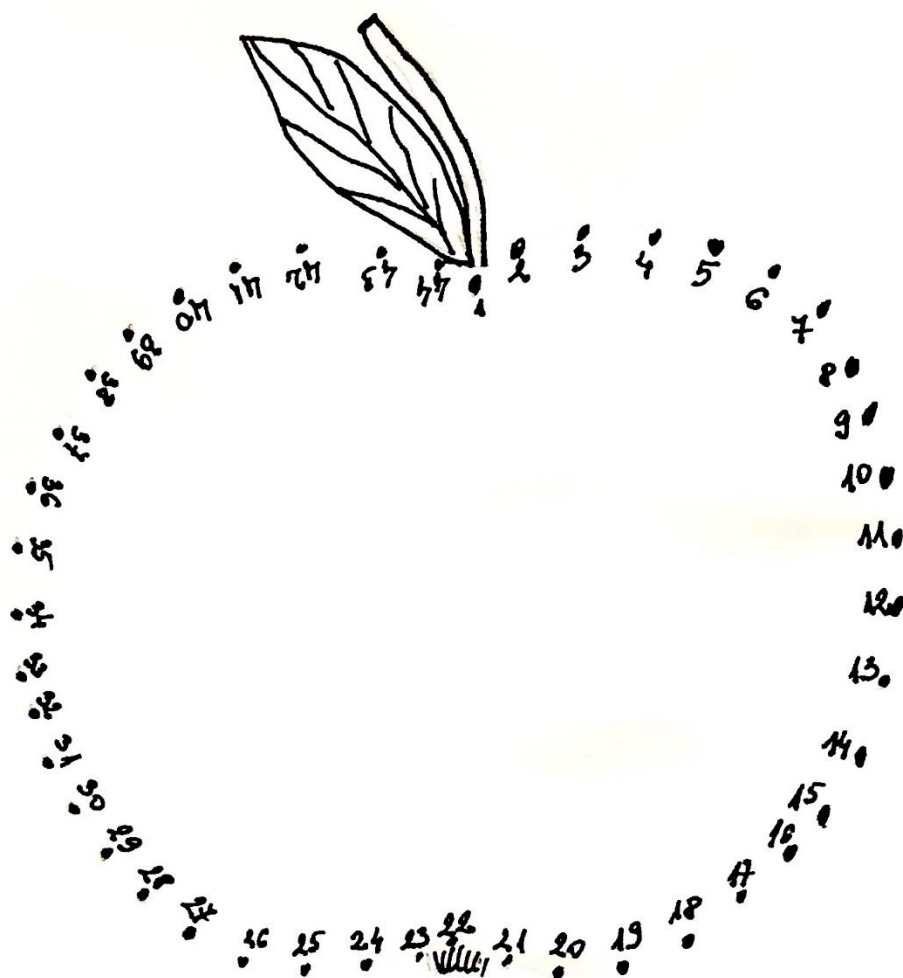
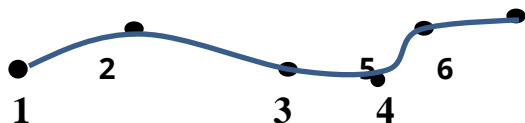


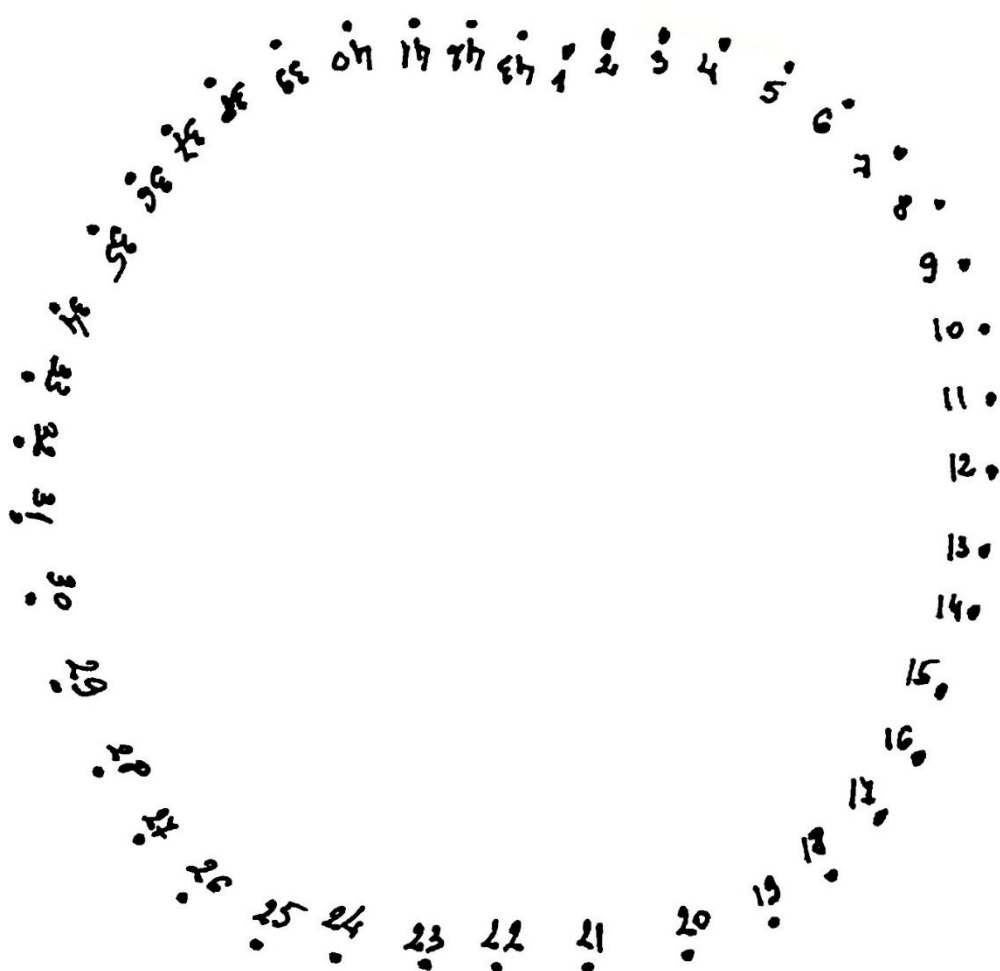


2. Join the dots.



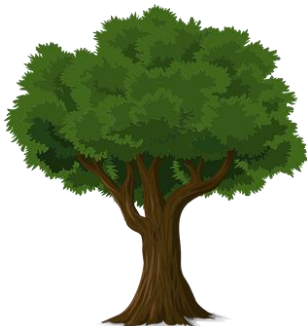
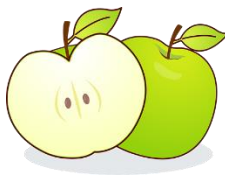
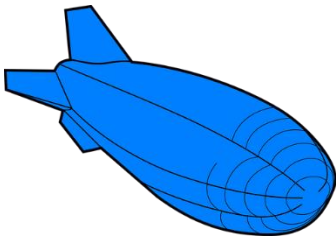
Example:





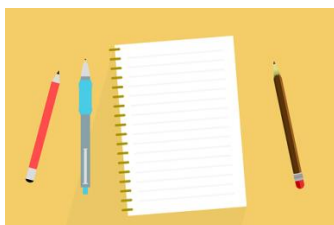
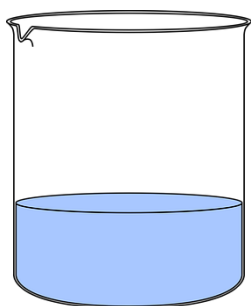
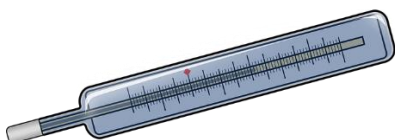


3. Circle the objects which float.





4. Select the objects needed for the experiment.

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5. Arrange the images in the right order according to the video.

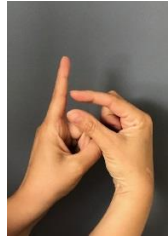


1 → 2 → 3.....





6. Make the correspondence between image and written word.



APPLE

AIR

WATER



ORANGE

AIR BUBBLES

FLOATS

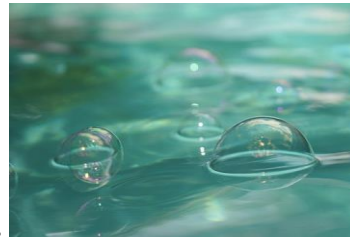




7. Read the sentences.



a) Air is lighter than water.



b) Air has a lower density than water.



c) The apple contains a lot of water.



d) The orange peel contains a lot of air bubbles.



e) The peeled orange cannot float.





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1. www.freepik.com
2. www.pixabay.com
3. www.pdclipart.org

