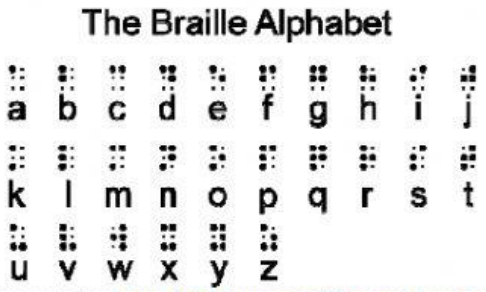
Reading 1 – Inventors

The Braille Alphabet - *Louis Braille (Coupvray, France, 1809 - Paris, France, 1852)*



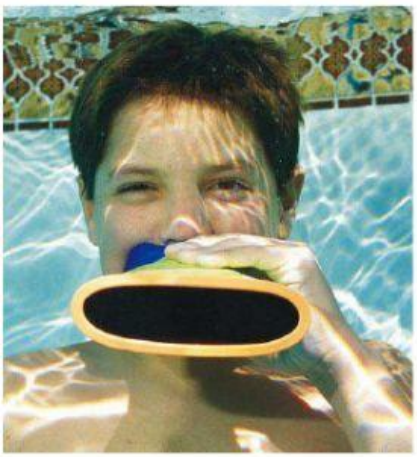
Photograph from www.lighthousepasco2.files.wordpress.com

Photograph from www.famousinventors.org

Louis Braille was just 3 years old in 1812 when he was injured and lost his vision. Later on, as a teen studying at The National Institute for Blind Youth in Paris, he designed a system using raised dots in specific patterns to aid in reading. He found those blind students had books that allowed the students to use their hands to touch large raised words on the page as a means for them to read. Braille decided to create a better system using raised dots instead of raised letters. The language of Braille has become the tactile writing system used by the blind and the visually impaired around the world.

The first Braille book was released in 1829, and in 1837 Louis added symbols for math and music. Braille has been adapted for nearly every single language spoken in the world, from Arabic to Vietnamese.

Water Talkie - *Richie Stachowski (Orinda, California USA 1985)*



Photograph from www.millennialentrepreneurs.com

In 1996, 11-year-old Richie Stachowski went on a trip to Hawaii with his family. "I was surfing with my dad when we dove under. There were so many beautiful things to see. I wished we could talk underwater," said Stachowski. After finding out that there were no inventions for this kind of sub-aquatic communication, Stachowski started researching underwater acoustics and trying out prototypes in the family pool. Eventually, he invented the Water Talkie – a conical device with a blow valve and plastic membrane that enables swimmers to talk with one another underwater from as far as 5 meters away.

Next, Stachowski went to New Jersey and showed his idea to Toys"R"Us. In few months, he had an order for 50,000 units. With the help of his mom, Stachowski started a company called Short Stack LLC (named in honor of his love for pancakes) and went on to invent other successful pool toys.

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The Ice Cream Maker - *Nancy Johnson (1795 -1890 USA)*

Photograph from www.one.org

Photograph from www.inventricity.com

In 1843, Nancy became one of the most important women in history by patenting a design that made ice cream, which is still used to the current day! We don't know what more to say other than thank you, Nancy Johnson. Thank you. No one knew where she was from, but people say Washington D.C., Philadelphia, and even New Jersey.

Nancy Johnson's invention enables people to make ice cream, but also to sell them. We can buy ice cream almost everywhere.

The first 100 % solar powered house - *Maria Telkes (Hungary 1900 - USA 1995)*

Photograph from www.one.org

Photograph from www.tinyhousetalk.com

In 1947, Maria Telkes, a Hungarian scientist invented the thermoelectric power generator to provide heat for Dover House, a wedge-shaped structure. She conceived the idea together with architect Eleanor Raymond. Girl power indeed!

She designed the first residential solar heating system and invented many patented solar-powered devices. She was known as the "Sun Queen" during her career due to her many inventions including one of the first successful solar ovens, solar heating systems, and a solar water cleaning system for making seawater potable.

Immigrating to the United States in 1925, Telkes took a position in solar energy research and development at the Massachusetts Institute of Technology (MIT), and became an Associate Research Professor in 1945 in the field of metallurgy. It was during her time at MIT that she became widely known for her research in solar energy.

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11. Before Braille's invention, what reading system was used by people with visual difficulties?

A. Storytelling.

B. Raised dots.

C. Listening.

D. Raised letters.

12. Which is the oldest invention?

A. The Braille Alphabet.

B. The Water Talkie.

C. The ice cream maker.

D. The solar powered house.

13. Who were children or teenagers when they became inventors?

A. Nancy Johnson and Louis Braille.

B. Maria Telkes and Nancy Johnson.

C. Richie Stachowski and Louis Braille.

D. Louis Braille.

14. Richie Stachowski had his idea while he was _____ in Hawaii.

A. talking

B. snorkelling

C. windsurfing

D. surfing

15. Where did Stachowski start the researching in underwater acoustics?

A. In the bath.

B. In a river.

C. In the pool.

D. At the sea.

16. What's the shape of the Water Talkie?

A. Conical.

B. Triangular.

C. Hexagonal.

D. Spherical.

LIVEWORKSHEETS

17. _____ **is still alive and he is the inventor of a variety of toys that can be used in water.**

18. What is Nancy Johnson's invention exactly for?

- **A.** Freezing ice cream.
- **B.** Making and selling ice cream.
- **C.** Giving colour to the ice cream.
- **D.** Making ice cream cones.

19. What type of invention can we buy in a food shop or a supermarket?

- **A.** An ice cream.
- **B.** A solar powered house.
- **C.** The Water Talkie.
- **D.** The Braille Alphabet.

20. What invention would you feel thankful if you feel hungry?

- **A.** The water Talkie.
- **B.** A solar powered house.
- **C.** An ice cream.
- **D.** A book written in Braille system.

21. Some other solar inventions by Maria Telkes are…

- **A.** ovens, water distilling or heating systems.
- **B.** heating systems and mobile phone chargers.
- **C.** ovens, heaters and streetlights.
- **D.** water and spirit distilling systems.

22. Maria Telkes carried out her Dover House heating project co-working with _____.

LIVEWORKSHEETS

Reading 2 – Irati Forest touristic brochure

Irati Forest

Photograph from www.amaelur.com

The Irati Forest is the second largest and best preserved beech and fir tree forest in Europe, an immense green forest of 17,000 hectares that still remain wild. Located in Pyrenees of Navarre, it is a natural treasure. There are two ways to access the Irati Forest: on the western side from Orbaitzeta and on the eastern side from the pretty village of Otsagabia.

Photograph from www.amaelur.com

Sit down in the heart of the forest and enjoy nature; the silence is broken only by the sound of water. Admire the crystalline colour of the Irati river that turns turquoise in the Irabia reservoir and listen to the sounds of the fauna.

This place is the habitat of multiple wild animals, birds and fish such as: foxes, wild boars, roe deers, stags, goldcrests, chaffinches, robins, black woodpeckers, white-backed woodpeckers and trouts.

The variety of colour is amazing in autumn when brown, yellow and red leaves decorate the tops of the trees.

Activities

Photograph from www.enetural.com

Mountain biking

There are incredible cycling trails and tracks all around the Irati Forest, suitable for children and families (green line), of moderate difficulty for people in general (blue line), or of advanced difficulty for risky, adventurous people (red line).

Bungy jumping

One jump full of emotion. Bungee jumping is like a giant pendulum as we jump from one point on the bridge and the ropes are attached at the opposite end. Jumping from the Orbara bridge (100 meters high) is one of the most exciting experiences you can feel, it's a 7 seconds free fall!

To practice bungy jumping at Irati Forest, please contact **www.iratiaventura.com**

Photograph from www.viajealpirineo.com

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Where to sleep

There are campsites, hotels or touristic apartments, but the rural guesthouses are the best option in the area. There are lots of them, sorted by price, location or number of rooms at **navarrabooking.com**. Here you have some examples:

Photographs from www.turismo.navarra.es

Iratienea

ORBARA. (The Pyrenees)

Tel.: 618279393

casa.iratienea@avired.com

Type: **Rural House (Entire)**

Weekend **from 325.00 €**

Number of places: **6**

Distance **4 Km**.

Ertegi

ARIA. (The Pyrenees)

Tel.: 630457108

ertegietxea@gmail.com

Type: **Rural House (Entire)**

Weekend **from 395.00 €**

Number of places: **8**

Distance **7 Km**.

For a cheaper option, you can also check the following campsite:

Asolaze

ISABA. (The Pyrenees)

Tel.: 948893034

info@asolazecamping.com

Type: **Campsite**

Adult **from 5.50 €**

Number of places: **400**

Distance **27 Km**.

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23. The Irati Forest is a 17,000 hectares…

A. wild oak and beech forest.

B. preserved beech and fir garden.

C. immense beech and fir forest.

D. first largest forest in Europe.

24. When the Irati river reaches _____, it changes its colour getting a beautiful blue.

25. There are different sounds that you can listen to at this forest, like…

A. cars and lorries.

B. the fauna or the water.

C. the trees.

D. rural houses.

26. Where can you sleep if you want to be the closest possible to the forest?

A. In Orbara.

B. In Aria.

C. In Erro.

D. In Isaba.

27. You can follow the _____ line tracks for an easy itinerary appropriate for children.

28. Where can you spend a night if you are on holidays with your parents, twin sisters, grandparents, an uncle and three cousins?

A. Asolaze.

B. Ertegi.

C. Iratienea.

D. At navarrabooking.com.

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29. **The entrance to the Irati Forest is possible from two villages: Otsagabia and**

_____.

30. **How tall is the Orbara Bridge?**

A. 110 meters tall.

B. 107 m.

C. Taller than 90 meters.

D. 332 m.

31. **Which is a type of fish you can find at this nature reserve?**

A. A woodpecker.

B. A hake.

C. A trout.

D. A deer.

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