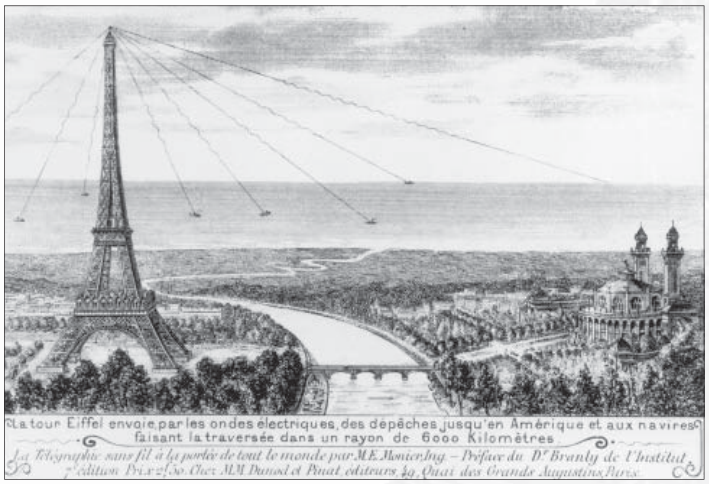
7 Hello? Is that the Eiffel Tower?

At the time of construction of the Tower, it had already been planned to disassemble it some twenty years later. Thanks to the scientific works started and implemented by Gustave Eiffel, The Iron Lady is still overlooking the capital today.

On November 5, 1898, Eugene Ducretet and his associates achieved the first wireless connection between the top of the Eiffel Tower, at a height of 300 m, and the Pantheon across a distance of 4 km.

Ducretet and Roger transmitting from the Eiffel Tower to the Panthéon



The TSF (radio System) – Using electric waves, the Eiffel Tower wires messages to America and to ships within a range of 5,200 kilometers.

Gustave Eiffel offered the site of the Tower to the Minister of War in 1903 to set up antennas and he promised to cover the expenses that might result from radio transmission experiments. From 1904, under the supervision of captain Gustave Ferrié, the Tower became the ultimate tool of the military wireless transmission network. In April 1910, the army inaugurated the first dispatch of messages to the navy after Eiffel had placed it at its disposal. From May 23, 1910 onwards, the first regular time signals transmission service was inaugurated, the transmission was broadcast and could be heard at a distance of up to 5,200 km.

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On October 25, 1915, The Eiffel Tower received a message from Arlington, Virginia (USA). The voice of American navy member Mr. Alexanderson covered a distance of 6,800 km across the Atlantic ocean.

During World War I, the Tower continued to be used for the reception and transmission of messages. It was called the « Big Ear » due to the part it played in intercepting the enemy's messages. Thanks to the Tower, in 1914, Mr. Joffre was informed that Von Kluck's German soldiers were arriving East of Paris and decided to requisition all of Paris taxis to take the soldiers to the Marne front. It was also thanks to the interception of messages from the Eiffel Tower that the famous spy Mata Hari was arrested in 1915.

Between the two wars, the TSF (French Radio) made use of the developments in military techniques, and developed civil applications.

In November 1921, the Eiffel Tower broadcast its first radio programme and from December 24 of the same year, it broadcast the first regular radio programme consisting of a weather forecast, a press review and a piece for violin. Radio Tour Eiffel continued to broadcast in 1922 with a daily programme from 2.30 pm to 5 pm. The programmes were prepared in a temporary studio located in the Northern pillar of the Tower. Maurice Privat's News Bulletin was broadcast on November 3, 1925. Radio Tour Eiffel stopped its broadcasts when the Germans reached Paris in 1940.

The first days of radio: Sacha Guitry, Yvonne Printemps and général Ferrié

1925 marked the first television broadcast tests carried out by Edouard Belin in the Eiffel Tower. The first television programme was broadcast in 1935 with a horizontal definition of 60 lines. In 1945, after World War II, the antennas and installations were repaired in order to resume transmission from the Tower.

On the occasion of the coronation of Queen Elizabeth II of England in 1953, an event was retransmitted in Eurovision for the first time in history.

Four years later a television antenna was placed at the top, which raised the height of the Tower to more than 318 metres.

Since 2000, a new antenna has further raised the Tower to 324 metres.

Today, the large number of antennas installed in the Eiffel Tower makes TNT broadcasting possible.

Hello? Is that the Eiffel Tower?

Exercises

CP - CE1

French /Reading /Spelling

EDUCATIONAL OBJECTIVE

Copying a short text without making any mistake.

Grâce à ses 300 mètres de hauteur, la Tour a servi de relais aux télécommunications dès 1898, avec une liaison de télégraphie sans fil entre elle et le Panthéon. Eiffel offre ensuite sa Tour au gouvernement pour y placer des antennes.

• Ask the pupils to copy the above paragraph without making any mistake. Be careful with capital letters, provide a pattern to the pupils and explain the difference between proper nouns and common nouns, the use of capital letters at the beginning of the sentence (after a period) and the use of capital letters for proper

Mathematics

EDUCATIONAL OBJECTIVE

Recognizing squares and nodes in a grid.

• Find the coordinates of the Eiffel Towers in this grid.

	1	2	3	4	5	6
A						
B						
C						
D						
E						
F						

• Ask the pupils to draw a circle in B6, a square in C2 and a moon in F3.

Discover the world

EDUCATIONAL OBJECTIVE

Discovering and locating the shapes usually used to represent space, locating places.

• Ask the pupils what type of document they are working with (map). what city it is (Paris), and ask them to locate the Eiffel Tower on the map using the reference letters and numbers.

• Then, find out the coordinates of other monuments.

• You can also do the same with the maps of other cities.

Hello? Is that the Eiffel Tower?

Exercises

CE2 - CM1 - CM2

French / Reading / Grammar

EDUCATIONAL OBJECTIVE

Identifying the possessive phrase and the nominal group, using the relative clause (add, suppress, replace the adjective or the possessive phrase and vice versa).

La Tour parisienne mesure plus de 300 mètres.
La Tour de Paris mesure plus de 300 mètres.
La Tour qui est construite à Paris mesure plus de 300 mètres.

• On the basis of the above three sentences, show the pupils that it is possible to vary the structure of sentences according to what is added to the nouns: adjectives, possessive phrases, relative clauses.

• Ask the pupils to replace the underlined adjectives with a possessive phrase or a proposition relative subordinate clause.

La première liaison télégraphique a eu lieu en 1898.
Les émissions radiophoniques datent de 1922.
Nous aimons beaucoup les sorties scolaires !
La Tour est le monument parisien préféré des touristes étrangers.

Mathematics

EDUCATIONAL OBJECTIVE

Solving problems relating to proportionality and problems relating to percentages and scales.

• Have the pupils solve the problems.

On the Paris map, 1 cm = 1 km. What is the scale of the map?

1 km = 100 000 cm, so the scale of the map is 1/100,000th because 1 cm represents 100,000 cm.
What is the distance between the Tower and the Pantheon, knowing that the distance is equal to 4 cm on the map?

If the Eiffel Tower is 6 cm away from the Sacré Cœur on the map, what is the real distance between the 2 monuments?

6 cm are equal to 6 km because 6 x 100,000 = 600,000 cm = 6 km.

• It is also possible to calculate the distance between the Tower and the Bois de Vincennes (10 cm on the map) as well as other distances using other scales applied to the town or department where the pupils live.

Geography

EDUCATIONAL OBJECTIVE

Reading a map and finding one's way about.

• Ask the pupils to indicate the elements that form the map: title (Paris and its monuments), orientation (read the information concerning cardinal points), scale (1cm = 1 km).

• Ask the pupils to locate the Eiffel Tower on the map.

What is the name of the river that flows at the base of the Tower? *The river Seine*
Where is the Pantheon located in relation to the Eiffel Tower? *South-East*
What is the monument located North of the Tower? *The Arc de Triomphe*
Where is Notre-Dame located in relation of the Tower? *East*
Give the names of the forests located East and West of Paris. *Vincennes and Boulogne*