

## Science - Sciences CM2 / 5th grade

| Instruction in French   | Instruction in English  |
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| <b>Science - Sciences</b>   |   |
| <b>Theme : L'énergie</b><br><i>Theme: Energy</i>  | <b>Theme:Health and The Human Body</b>  |
| Différentes sources d' <b>énergie</b> (fossiles ou renouvelables)<br><i>Different <b>energy</b> sources (fossil or renewable)</i>   | Students understand the movement of the body (the muscular and skeletal systems and their relationship to movement).<br>(approfondissement/ in depth study)         |
| Les besoins en énergie.<br><i>Energy needs.</i>   |   |
| Les conséquences de la production et de la consommation d'énergie.<br><i>The consequences of the production and consumption of energy.</i>  | Students understand the function of nutrition.<br>(approfondissement/ in depth study)   |
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| <b>Thème: La pollution -Développement durable</b> <i>Theme: Pollution-Sustainable Development</i>   |   |
| <b>Mélanges et solutions</b> ( <i>approfondissement</i> ).<br>Traitement des <b>eaux</b> usées.<br>Visite (virtuelle ?) d'une station d'épuration.<br><i>Mixtures and solutions (in depth study).</i><br><i>Treatment of wastewater.</i><br><i>Virtual(?) visit of a wastewater treatment plant</i> | Students understand the elements of the digestive, respiratory and circulatory system .   |
| Les déchets : causes et conséquences de l'augmentation.<br>Évolution des comportements de l'homme, comparaison avec d'autres pays.<br><i>Waste: causes and consequences of its increase.</i><br><i>Evolution of the attitudes of men, comparison to other countries.</i>                            | Students understand hygiene and health, particularly actions that are beneficial or harmful to the body, specifically in areas such as sports, nutrition and sleep. |
| <b>Theme : Le fonctionnement du corps humain.</b> <i>Theme: The human body and its functions</i>  |   |
| <b>La circulation sanguine</b><br>:( <i>approfondissement</i> )<br>(premiers aspects chimiques simples)<br>échanges gazeux, nutriments, déchets.<br>Blood flow (in depth study) (first chemical aspects) gas exchange, nutrients, waste.  |   |
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| <p><b>Theme : Les êtres vivants dans leur environnement.</b><br/> <b>Theme: <i>Living things and their environment.</i></b></p>   | <p><b>Theme: Living Things in their Environment</b></p>  |
| <p>La forêt : importance de la biodiversité.<br/> Les relations entre les éléments d'un milieu.<br/> Classer des animaux disparus : les fossiles.<br/> <b>Forest: the importance of biodiversity.</b><br/> <i>The relationships between the elements of a community.</i><br/> <i>Classify extinct animals: fossils.</i></p> | <p>Students study biodiversity and discover differences and similarities between living things.</p>                                      |
| <p>Étude systémique de la forêt et de son importance. (Première approche des végétaux dans la fixation du CO2).<br/> <i>Systemic study of the forest and of its importance. (A first approach of plants and of CO2 fixation).</i></p>   | <p>Students understand the classification/categorization of living things.</p>   |
|   | <p>Students understand the different developmental stages of plants and animals.</p>   |
|   | <p>Students understand how, when, and under what conditions each developmental stage occurs.</p>   |
|   | <p>Students understand the different methods of reproduction.<br/> (in depth study)</p>  |
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| <p><b>Theme : Le fonctionnement du vivant</b><br/> <b>How living things work</b></p>  | <p><b>Theme: Weather on Earth</b></p>  |
| <p>La reproduction humaine et éducation à la sexualité.<br/> <i>Human reproduction and sexuality education</i></p>  | <p>Students know that energy from the Sun heats Earth unevenly, causing air movements that result in changing weather patterns.</p>      |
| <p><b>Theme : La matière</b><br/> <b>Theme: Matter</b></p>  |  |
| <p>L'air, mélange de gaz.<br/> Les gaz à effet de serre.<br/> Les effets de la pollution de l'air, lien avec la respiration.<br/> <i>The air, mixture of gas.</i><br/> <i>Greenhouse gas emissions.</i><br/> <i>The effects of air pollution, and connection with breathing.</i></p>  | <p>Students know uneven heating of Earth causes air movements.</p>   |
|   | <p>Students know the influence that the ocean has on the weather and the role that the water cycle plays in weather patterns.</p>        |
|   | <p>Students know the causes and effects of different types of severe weather .</p>   |
|   | <p>Students know how to use weather maps and data to predict local weather and know that weather forecasts depend on many variables.</p> |

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|  | Students know that the Earth's atmosphere exerts a pressure that decreases with distance above Earth's surface and that at any point it exerts this pressure equally in all directions.   |
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| <b>Thème : Les objets techniques</b><br><i>Theme: technical objects</i>  | <b>Theme: The Solar System</b>  |
| Transformation du <b>mouvement</b> . (rotation/ translation). Approfondissement<br>The transformation of <b>movement</b> . (rotation / translation). In depth study.   | Students understand the rotation of the Earth and the planets around the sun, and the rotation of the Earth on its axis.  |
| <b>Montages électriques</b> en série ou dérivation.<br>Rappel : le «court-circuit» et les dangers de l'électricité.<br><i>Series or parallel electrical wiring.</i><br><i>Reminder: the "short circuit" and the dangers of electricity.</i>  | Students know that the Sun, an average star, is the central and largest body in the solar system and is composed primarily of hydrogen and helium .   |
| <b>Thème : Le ciel et la terre</b><br><i>Theme: The sky and the Earth</i>  |   |
| Les <b>séismes</b> (en liaison avec la localisation des volcans.)<br>Notion d'activités terrestre permanente (tectonique des plaques).<br><b>Earthquakes</b> (in conjunction with the location of volcanoes.)<br><i>Concept of permanent terrestrial activities (plate tectonics).</i> | Students know that the solar system includes the planet Earth, the Moon, the Sun, eight other planets and their satellites, and smaller objects, such as asteroids and comets.  |
|  | Students know that the path of a planet around the Sun is due to the gravitational attraction between the Sun and the planet .  |
|  | Students understand the duration of daylight depending upon the seasons.  |
|  | Students know that telescopes magnify the appearance of some distant objects in the sky, including the Moon and the planets. The number of stars that can be seen through telescopes is dramatically greater than the number that can be seen by the unaided eye. |