|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Biology | Chemistry | Working Scientifically | Geography  | Design and technology  | Citizenship | Art and Design |
| Relationships in an ecosystem | Structure and function of living organisms | Genetics and evolution | Material cycles and energy | Earth and atmosphere | The particulate nature of matter |
| Topic | Activity | Interdependence  | Pollination | Accumulation of toxic materials | Nutrition and digestion | Reproduction | Differences between species | Variation and natural selection | Environmental changes, adaptations and extinction | Biodiversity and gene banks | Photosynthesis | Cellular respiration | Carbon cycle  | Composition of the atmosphere | Co2, humans and climate | Earth’s resources and recycling | States of matter | Chemical reactions and particle model | Scientific attitudes | Experimental skills and investigations  | Analysis and evaluation | Measurement | Human and physical geography  | Design and evaluate | Political system, law and justice  | Recording observations |
| Climate change | Carbon cycle passport |  |  |  |  |  |  |  |  |  | X |  | X | X | X |  |  |  |  |  |  |  | X |  |  |  |
| Invasive species game | X |  |  |  |  | X |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |
| Measuring carbon in trees |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |
| Snakes and ladders |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  |  | X |  |  |  |
| Species Trumps |  |  |  |  |  | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pollution | Pesticides games: Pollinator game |  | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pesticides games: The peregrine’s fate |  |  | X |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pollution calculator |  |  | X |  |  |  |  |  |  | X |  |  |  | X | X |  |  |  |  | X | X |  |  |  |  |
| Pollution detectives  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |
| Particulate matters |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  | X |  |  |  |  |  |  |
| Smog marshmallows |  |  | X |  |  |  |  |  |  |  |  |  | X | X |  | X | X |  |  |  |  |  |  |  |  |
| Urban habitats  | Big ideas for urban nature | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |
| Connections – natural world and built environment | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |
| Designing cities of the future | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |
| Habitat loss and fragmentation game | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |
| Urban nature act | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |
| Web of life game | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Soil recipe |  |  |  | X | X |  |  |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tools for enquiry  | Explorer cards: Ecology |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  |
| Explorer cards: fieldwork |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  | X |  |  |  |  |
| Creating a field notebook |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  | X |  |  | X |
| Signs of the seasons | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| End of lesson reflections |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |
| Question generation activities |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |
| Developing your own mission | Scientific Question criteria  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  |
| Improving questions  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  |
| What’s your strongest question? |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  |
| Creating a research proposal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  |
| Hypothesis stories |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X |  |  |  |  |  |