|  |  |  |
| --- | --- | --- |
|  **Classifying and Grouping Materials** | **Changing Materials** | **Working Scientifically** |
| * Can they describe the simple physical properties of a variety of everyday materials?
* Can they compare and group together a variety of materials based on their simple physical properties?
* Can they link colours to natural and man-made objects?
 | * Can they explore how the shapes of solid objects can be changed? (squashing, bending, twisting, stretching)
* Can they find out about people who developed useful new materials? (John Dunlop, Charles Macintosh, John McAdam)
* Can they identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper, cardboard for particular uses?
 | Observing Closely | Performing Test | Identifying / Classifying | Recording Findings |
| * Can they use <see, touch, smell, hear or taste> to help them answer questions?
* Can they use some scientific words to describe what they have seen and measured?
* Can they compare several things?
 | * Can they carry out a simple fair test?
* Can they explain why it might not be fair to compare two things?
* Can they say whether things happened as they expected?
* Can they suggest how to find things out?
* Can they use prompts to find things out?
 | * Can they organise things into groups?
 | * Can they use <text, diagrams, pictures, charts, tables> to record their observations?
* Can they measure using <simple equipment>?
 |
| **Challenge** |
| * Can they describe the properties of different materials using words like, transparent or opaque, flexible, etc.?
* Can they sort materials into groups and say why they have sorted them in that way?
* Can they say which materials are natural and which are man made?
 | * Can they explain how materials are changed by bending, twisting and stretching?
* Can they tell which materials cannot be changed back after being heated, cooled, bent, stretched or twisted?
 | * Can they suggest ways of finding out through listening, hearing, smelling, touching and tasting?
 | * Can they say whether things happened as they expected and if not why not?
 | * Can they suggest more than one way of grouping materials and explain their reasons?
 | * Can they use information from books and online information to find things out?
 |

|  |  |  |
| --- | --- | --- |
| **Learning Objectives** | **Activities** | **Learning Outcomes and AFL** |
|  |  |  |