Observing

Using the five senses to find out about objects and events: their characteristics, properties, differences, similarities, and changes.

Predicting

Speculating what may occur in the future based on prior knowledge, observations, and reasoning.

Questioning

A strategy to make meaning or wonder about uncertainties.

Hypothesizing

Making educated guesses or predictions based on evidence that must be tested through experimentation to establish credibility.

Searching

Locating and using several sources, developing self-reliance in acquiring library and Internet skills.

Modeling

Constructing physical/concrete or abstract representations of ideas, objects or events to clarify explanations or demonstrate relationships; used to reinforce concepts, demonstrate learning, and /or illustrate phenomena which cannot be directly observed.

Interviewing

Asking, interviewing, and corresponding to gain primary information.

Investigating

Gathering background information, formulating problems / hypotheses.

Inferring

Using logic to draw conclusions from the results of investigating/problem-solving.

Using Instruments

Using the five senses to find out about objects and events: their characteristics, properties, differences, similarities, and changes.

Calibrating

Checking, adjusting, or determining an instrument's accuracy by comparison with a standard.

Gathering Data

Collecting evidence through measurements, facts, figures, pieces of information, statistics (either historical or derived by calculation), experimentation, surveys, etc.

Measuring

Assigning numbers to observations, e.g., metric units, time, student-generated units, using appropriate measuring devices and techniques.

Demonstrating

Setting up apparatus, making it work, describing parts and functions, illustrating scientific principles.

Recording

Noting, documenting, tabulating, charting; working systematically, working regularly.

Constructing

Putting together component parts; to build or erect.

Planning

Working systematically, regularly organizing for future, seeing possible results.

Inventing

Designing something useful, for the first time, through the use of the imagination, ingenious thinking and / or experimentation.

Designing

The overall plan or strategy by which hypotheses / research questions and technological problems are answered (with or without innovation).

Experimenting

Carrying out a designed investigation to test a hypothesis or answer a question.

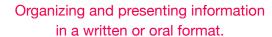|			
Comparing	Looking for similarities.	Seeing implications and relationships, discerning causes and effects, locating new problems.	**Analyzing**
Contrasting	Looking for differences.	Recognizing good and poor features; judging and assessing.	**Evaluating**
Classifying	Putting things into groups and subgroups, identifying categories, deciding between alternatives.	Picking out important items, memorizing, associating.	**Reviewing**
Outlining	Employing major headings and subheadings; using sequential, logical organization.	Engaging in oral, written, or any other appropriate form of communication with others.	**Discussing**
Graphing	Visually representing data.	Clearly describing, clarifying main points, and focusing on the "why" and/ or "how" of the issue, concept or idea.	**Explaining**

Reporting

Organizing and presenting information in a written or oral format.

Writing

Conveying information (e.g., questions, observations, experimental report) by graphical means.

Reflecting

The activity of either an individual or group that involves analyzing, judging the importance of, and making connections to the learning experience.

Teaching

Making meaning of concepts or processes by organizing them into key facts and ideas and clearly conveying them to others.

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Matching Cards

smarter science / éduca sciences

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