

SCIENCE PROCESS SKILL

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Science process skills refer to the following six actions, in no particular order: observation, communication, classification, measurement, inference, and prediction. These basic skills are used in the experiments of scientists and students, as well as into the everyday life of average person, to a degree. They allow everyone to conduct objective investigation and to reach conclusions based on the results. The first of the science process skills, **observation**, involves noting the attributes of objects and situations through the use of the senses. **Classification** goes one step further by grouping together objects or situations based on shared attributes. **Measurement** involves expressing physical characteristics in quantitative ways. **Communication** brings the first three skills together to report to others what has been found by experimentation. **Inference** and **prediction** are the more sophisticated of the science process skills. Beyond simply seeing and reporting results, scientists must extract meaning from them. These skills can involve finding patterns in the results of a series of experiments, and using experience to form new hypotheses. It is also essential for a scientist to be able to distinguish his objective observations from his inferences and predictions. This is because scientific inquiry and study depend on objectivity and an avoidance of hasty assumptions in experimentation. All of the science process skills contribute to a larger purpose, namely problem solving. Problem solving is the reason for scientific inquiry, and forms the essence of it. A typical experiment wherein a scientist uses process skills and the scientific method will start with certain questions being asked. Based on prior knowledge and experience, the scientist will make an educated guess as to the answer or outcome.

REFERENCES:

1. <http://www.longwood.edu/cleanva/images/sec6.processskills.pdf>
2. http://www.tufts.edu/as/wright_center/products/sci_olympiad/pslsl_training_hammond.pdf
3. www.sabah.edu.my/cwr005/SPS/SPS2.PPT
4. http://library.unesco-iicba.org/English/SECONDARY_SCIENCE_SERIES/science_lessons/2_process_skills.htm
5. <http://www.slideshare.net/benjie1472/science-process-skills-1888384>

TASK

Design science process activity **observation** involving minimal 3 senses organs for classifying acid and base solution.

QUIZ

1. Name three activities of low level science process skill
2. Give opinion, why science process skill is important for student as a basic to conduct inquiry.
3. Give comment, why questioning is important in doing observation.