Assessment

Which Soil do we Choose ?

Developers:

Institute:
Country: Argentina

Assessment Criteria

Part A Assessment of Application of Skills

Process Skill

1. Seek and collect information related to the study of soil, from the books, computers networks and web pages.

- The teacher observes the materials presented by the students, and the analysis made about them.

A. Not able to collect work material.
B. Able to collect material, but is not able to select the relevant one.
C. Able to collect material and able to select the relevant information.

2. To design and carry out experimental determinations, in situ, and at the lab.

- The teacher observes the students carrying on the work, in the field trip and lab too.

A. Not able to devise a experimental determination to do during the field trip, and the lab either.
B. The student devise the experimental determinations, but is not able to do it in the field trip and lab either.
C. The student devise the experimental work, and do it correctly, obtaining experimental results.

Intellectual Skill

3. Explain the advantages and disadvantages of different types of soil.

- The teacher listens to the students´ opinion and analyse the tables and charts.

A. Not able to explain the advantages and disadvantages of different types of soil.
B. Able to explain the advantages and disadvantages, but is not able to present it in tables and charts.
C. Able to explain correctly and make comparatives charts and tables explaining the advantages and disadvantages of different kind of soil.

4. Explain density and how the density of soil can be determined.

- The teacher asks some questions about the concept of density and listen the students´ ideas to determinate the density of soil.

A. The student is not able to comprehend the concept of density.

B. The student explain correctly the concept of density, but is not able to devise a way to determinate density experimentally of soil.
C. The student explain correctly the concept of density, and is able to devise a simply and practical way to determine density of soil.

Social Skill

5. To cooperate with partners in the group in undertaking an experimental investigation.
- The teacher observes the development of the group work, during the investigation, the field trip and the elaboration of findings for the final report.

A. Not able to have related with the rest of the group members.
B. The student is integrated to the group, but does not shows interest for the work, that the group is doing.
C. The student in integrated to the group, and work co-operatively with their partners, developing the tasks of investigation and elaborating conclusions.

6. Decide, with reasons, which field Mr. Ground should buy.
- The teacher reads the final report presented to Mr. Ground.

A. Not able to inform what field would be appropriate to buy by Mr. Ground.
B. The student indicates what field Mr. Ground should buy, but does not justify the reasons for this election.
C. The student decide what field Mr. Ground should buy, and justify it, basing its election in the experimental data

Personal Skill

7. Communicate

Part B Assessment by Lesson

Part C Assessment by Teaching Strategy

Student Assessment Tool based on the Teacher's Marking of Written Material

	Dimension	**Criteria for evaluation** **The student:**	**Students' name in the group**			

1	Socio-scientific decision making	Gives a justified socio-scientific decision to an issue or concern, correctly highlighting the scientific component				
2	Writes a report of the decision made	Puts forward a well argued decision as to which field Mr Ground should purchase based on experimental and other data.				

Student Assessment Tool based on the Teacher's Oral Questioning

	Dimension	**Criteria for evaluation The student:**	**Students' name in the group**			
1	Questions to individuals in a Whole Class setting on the concept of density	Answers questions at an appropriate cognitive level using appropriate scientific language				
		Shows interest and a willingness to answer				
		Willing and able to challenge/support answers by others, as appropriate				
	Explain the advantages and disadvantages of different types of soil.					

Student Assessment Tool based on the Teacher's Observations

	Dimension	**Criteria for evaluation The student:**	**Students' name in the group**			
1	To cooperate with partners in the group in undertaking an experimental investigation.	Contributes to the group discussion during the inquiry phases (raising questions, planning investigation/experiment, putting forward hypotheses/predictions, analyzing data, drawing conclusions, making justified decisions).				
		Cooperates with others in a group and fully participates in the work of the group.				
		Illustrates leadership skills – guiding the group by thinking creatively and helping those needing assistance (cognitive or psychomotor); summarising outcomes.				

		Shows tolerance with, and gives encouragement to, the group members.				
2	Seek and collect information related to the study of soil, from the books, computers networks and web pages	Understands the objectives of the investigation/experimental work and knows which tests and measurements to perform.				
		Performs the investigation/experiment according to the instructions/plan created.				
		Uses lab tools and the measurement equipment in a safe and appropriate manner.				
		Behaves in a safe manner with respect to him/herself and to others.				
		Maintains an orderly and clean work table.				
3	To design and carry out experimental determinations, in situ, and at the lab.	Presents the activity in a clear and practical manner with justified decisions.				
		Presents by illustrating knowledge and understanding of the subject.				
		Uses precise and appropriate scientific terms and language.				
		Presents with clarity and confidence using an audible voice.				