



UGANDA NATIONAL EXAMINATIONS BOARD
CONTINUOUS ASSESSMENT OBSERVATION CHECKLIST
535 PHYSICS
Senior 3, Term 2

Centre/CA No: **Year:**

Learner's Name: **Learner ID:**

Instructions to the facilitator:

1. This observation checklist contains **one** competency, which **must** be assessed by the end of this term.
2. Please **tick** against the indicator(s) the learner has exhibited at every level assessed.
3. Record the **number of indicators observed** in the boxes provided at the end of each level for **Subject Competency (SC)** and **Generic Skill (GS)**.
4. Indicate **N/A** if the learner has not been assessed for a particular level(s).

Theme:	Light
Topic:	Lenses and Optical Instruments.
Learning Outcome(s):	Know the properties of converging and diverging lenses, and how they are used in everyday life.
Subject Competency (SC):	Carries out investigations to determine the focal length of lenses.
Generic Skill (GS):	Critical thinking and problem-solving.
Learning Domain:	Psychomotor.

Level 1: Imitation

Subject Competency (SC): Imitating the teacher/peer/video clip/laboratory technician, etc., carrying out an investigation to determine the focal length of lenses, the learner:

- States the aim of the experiment clearly, using relevant words.
- Identifies the independent variable correctly.
- Identifies the dependent variable correctly.
- Identifies the controlled variable correctly.
- States the hypothesis of the experiment clearly, using relevant words.
- Lists all the relevant apparatus/materials required for the experiment.

- Draws/makes correct experimental setup.
- Writes the procedure of the experiment coherently/logically.
- Identifies and writes risks/errors or sources of errors in the experiment to be carried out.
- States the precaution(s)/mitigation(s) to the identified error(s).
- Carries out the experiment/investigation, following the stated procedure.
- Presents/records data in a logical format.
- Records data accurately, based on the instrument used and the required range.
- Carries out data analysis using an appropriate method(s).
- Interprets data correctly.
- Draws an appropriate conclusion, based on the interpretation made.
- Gives appropriate advice/recommendation(s), based on the findings.

Generic Skill (GS): Imitating the teacher/peer/video clip/laboratory technician, etc., demonstrating critical thinking and problem-solving skills in carrying out an investigation to determine the focal length of lenses, the learner:

- Plans and carries out investigations.
- Sorts and analyses information.
- Identifies problems and ways forward.
- Predicts outcomes and makes reasonable decisions.
- Evaluates different solutions.

Level 1 Indicators	
SC	GS

Level 2: Manipulation

Subject Competency (SC): Following instructions from the teacher/video clip/peer/manual, etc., to carry out an investigation to determine the focal length of lenses, the learner:

- States the aim of the experiment clearly, using relevant words.
- Identifies the independent variable correctly.
- Identifies the dependent variable correctly.
- Identifies the controlled variable correctly.
- States the hypothesis of the experiment clearly, using relevant words.
- Lists all the relevant apparatus/materials required for the experiment.
- Draws/makes correct experimental setup.
- Writes the procedure of the experiment coherently/logically.
- Identifies and writes risks/errors or sources of errors in the experiment to be carried out.
- States the precaution(s)/mitigation(s) to the identified error(s).
- Carries out the experiment/investigation, following the stated procedure.
- Presents/records data in a logical format.
- Records data accurately, based on the instrument used and the required range.

- Carries out data analysis using an appropriate method(s).
- Interprets data correctly.
- Draws an appropriate conclusion, based on the interpretation made.
- Gives appropriate advice/recommendation(s), based on the findings.

Generic Skill (GS): Following instructions from the teacher/video clip/peer/manual, etc., to demonstrate critical thinking and problem-solving skills in carrying out an investigation to determine the focal length of lenses, the learner:

- Plans and carries out investigations.
- Sorts and analyses information.
- Identifies problems and ways forward.
- Predicts outcomes and makes reasonable decisions.
- Evaluates different solutions.

Level 2 Indicators	
SC	GS

Level 3: Precision

Subject Competency (SC): Carrying out an investigation to determine the focal length of lenses independently with minimal errors, the learner:

- States the aim of the experiment clearly, using relevant words.
- Identifies the independent variable correctly.
- Identifies the dependent variable correctly.
- Identifies the controlled variable correctly.
- States the hypothesis of the experiment clearly, using relevant words.
- Lists all the relevant apparatus/materials required for the experiment.
- Draws/makes correct experimental setup.
- Writes the procedure of the experiment coherently/logically.
- Identifies and writes risks/errors or sources of errors in the experiment to be carried out.
- States the precaution(s)/mitigation(s) to the identified error(s).
- Carries out the experiment/investigation, following the stated procedure.
- Presents/records data in a logical format.
- Records data accurately, based on the instrument used and the required range.
- Carries out data analysis using an appropriate method(s).
- Interprets data correctly.
- Draws an appropriate conclusion, based on the interpretation made.
- Gives appropriate advice/recommendation(s), based on the findings.

Generic Skill (GS): Demonstrating critical thinking and problem-solving skills independently in carrying out an investigation to determine the focal length of lenses, the learner:

- Plans and carries out investigations.
- Sorts and analyses information.
- Identifies problems and ways forward.
- Predicts outcomes and makes reasonable decisions.
- Evaluates different solutions.

Level 3 Indicators	
SC	GS

Level 4: Articulation

Subject Competency (SC): Carrying out an investigation to determine the focal length of lenses correctly and innovatively, the learner:

- States the aim of the experiment clearly, using relevant words.
- Identifies the independent variable correctly.
- Identifies the dependent variable correctly.
- Identifies the controlled variable correctly.
- States the hypothesis of the experiment clearly, using relevant words.
- Lists all the relevant apparatus/materials required for the experiment.
- Draws/makes correct experimental setup.
- Writes the procedure of the experiment coherently/logically.
- Identifies and writes risks/errors or sources of errors in the experiment to be carried out.
- States the precaution(s)/mitigation(s) to the identified error(s).
- Carries out the experiment/investigation, following the stated procedure.
- Presents/records data in a logical format.
- Records data accurately, based on the instrument used and the required range.
- Carries out data analysis using an appropriate method(s).
- Interprets data correctly.
- Draws an appropriate conclusion, based on the interpretation made.
- Gives appropriate advice/recommendation(s), based on the findings.

Generic Skill (GS): Demonstrating critical thinking and problem-solving skills correctly while carrying out an investigation to determine the focal length of lenses, the learner:

- Plans and carries out investigations.
- Sorts and analyses information.
- Identifies problems and ways forward.
- Predicts outcomes and makes reasonable decisions.
- Evaluates different solutions.

Level 4 Indicators	
SC	GS

Level 5: Naturalisation

Subject Competency (SC): Carrying out an investigation to determine the focal length of lenses with ease, the learner:

- States the aim of the experiment clearly, using relevant words.
- Identifies the independent variable correctly.
- Identifies the dependent variable correctly.
- Identifies the controlled variable correctly.
- States the hypothesis of the experiment clearly, using relevant words.
- Lists all the relevant apparatus/materials required for the experiment.
- Draws/makes correct experimental setup.
- Writes the procedure of the experiment coherently/logically.
- Identifies and writes risks/errors or sources of errors in the experiment to be carried out.
- States the precaution(s)/mitigation(s) to the identified error(s).
- Carries out the experiment/investigation, following the stated procedure.
- Presents/records data in a logical format.
- Records data accurately, based on the instrument used and the required range.
- Carries out data analysis using an appropriate method(s).
- Interprets data correctly.
- Draws an appropriate conclusion, based on the interpretation made.
- Gives appropriate advice/recommendation(s), based on the findings.

Generic Skill (GS): Demonstrating cooperation & self-directed learning with ease while carrying out an investigation to determine the focal length of lenses, the learner:

- Plans and carries out investigations.
- Sorts and analyses information.
- Identifies problems and ways forward.
- Predicts outcomes and makes reasonable decisions.
- Evaluates different solutions.

Level 5 Indicators	
SC	GS