

STANDARD III MATHEMATICS HEC INTEGRATION GUIDE

Aligned ONLY to Standard III Mathematics Topics

This guide includes ONLY Standard III Mathematics topics and competencies. The integration examples are designed to support real-life learning and Human–Elephant Coexistence (HEC) concepts while maintaining the integrity of the Standard III Mathematics syllabus.

1. NUMBERS

Standard III Focus:

- Reading and writing numbers
- Comparing numbers
- Ordering numbers
- Place value

Integration Examples:

Teachers may use:

- number of trees planted,
- number of water containers,
- livestock numbers,
- number of households,
- number of farms.

Sample Activities:

- Count trees around the school.
- Compare numbers of goats and cows.
- Order distances between home, school, and water source.
- Read and write numbers from classroom surveys.

HEC Connection:

Communities often count resources such as crops, water containers, livestock, and planted trees to organise community activities responsibly.

2. ADDITION

Standard III Focus:

- Addition of whole numbers
- Solving simple word problems

Integration Examples:

Use examples involving:

- adding water containers,
- combining harvested crops,

- counting seedlings planted by groups.

Sample Activities:

- Add numbers of pupils participating in school cleaning.
- Add numbers of trees planted by two groups.
- Add water buckets collected by families.

HEC Connection:

Addition helps communities calculate resources and organise shared activities responsibly.

3. SUBTRACTION

Standard III Focus:

- Subtraction of whole numbers
- Solving subtraction word problems

Integration Examples:

Teachers may use:

- remaining crops after use,
- reduction of water containers,
- subtraction using classroom objects.

Sample Activities:

- Subtract damaged crops from harvested crops.
- Calculate remaining seedlings after planting.
- Solve simple subtraction stories using community examples.

HEC Connection:

Subtraction helps communities understand changes in resources and plan carefully.

4. MULTIPLICATION

Standard III Focus:

- Multiplication facts
- Repeated addition

Integration Examples:

Teachers may use:

- rows of crops,
- groups of seedlings,
- classroom groups.

Sample Activities:

- Multiply rows of maize plants.
- Count total trees planted using repeated addition.
- Multiply number of desks by learners seated.

HEC Connection:

Multiplication helps communities organise farming and community activities efficiently.

5. DIVISION

Standard III Focus:

- Division of whole numbers
- Sharing equally

Integration Examples:

Use examples related to:

- sharing water,
- sharing learning materials,
- sharing harvested crops.

Sample Activities:

- Divide seedlings equally among groups.
- Share books among learners.
- Divide fruits equally among pupils.

HEC Connection:

Division teaches fairness and responsible sharing of resources within communities.

6. FRACTIONS

Standard III Focus:

- Identifying simple fractions
- Reading fractions

Integration Examples:

Teachers may use:

- dividing fruits,
- dividing farming plots,
- sharing food or water.

Sample Activities:

- Show half of a water container.
- Divide a drawing into halves and quarters.
- Identify fractions of classroom groups.

HEC Connection:

Fractions help learners understand sharing and organisation of community resources.

7. MEASUREMENTS

Standard III Focus:

- Measuring length
- Measuring mass
- Measuring volume

Integration Examples:

Use:

- farm measurements,
- water containers,
- classroom objects,
- distances between places.

Sample Activities:

- Measure desks and books.
- Compare water container sizes.
- Measure rope lengths.
- Estimate distance between classroom objects.

HEC Connection:

Measurements help communities organise farms, water use, and movement pathways responsibly.

8. TIME

Standard III Focus:

- Reading clocks
- Days and months
- Time intervals

Integration Examples:

Teachers may discuss:

- school schedules,
- farming seasons,
- rainy and dry seasons,
- timing of daily activities.

Sample Activities:

- Read clock times.
- Identify months of rainy season.
- Calculate duration of school activities.

HEC Connection:

Communities organise activities according to time and seasons.

9. MONEY

Standard III Focus:

- Tanzanian currency
- Buying and selling

Integration Examples:

Use:

- market activities,
- buying seeds,
- selling crops,
- buying school materials.

Sample Activities:

- Calculate cost of seeds.
- Role-play buying and selling.
- Add and subtract amounts of money.

HEC Connection:

Responsible farming and resource use can support family income and community wellbeing.

10. SIMPLE DATA HANDLING

Standard III Focus:

- Counting objects
- Recording simple information
- Drawing simple charts or tallies

Integration Examples:

Teachers may collect data about:

- trees planted,
- water containers,
- classroom attendance,
- farming activities.

Sample Activities:

- Count trees around school.
- Record rainfall days.
- Create tally charts for classroom activities.

HEC Connection:

Communities collect information to help make decisions about farming, water, and shared resources responsibly.

GENERAL INTEGRATION PRINCIPLES

- Keep Mathematics as the main subject focus.
- Use simple and age-appropriate coexistence examples.
- Avoid technical environmental terminology.
- Use local community examples familiar to learners.
- Encourage learner participation through practical activities.
- Use discussions, counting, measuring, and group activities.

ECOWICE MONITORING INDICATORS

During observation ECOWICE staff should check whether:

- Mathematics objectives remain clear;
- learners participate actively;
- practical examples are used;
- coexistence examples support Mathematics understanding;
- activities remain age-appropriate and syllabus-aligned.