### Learning Area: Physics Key Generic Skill: Critical thinking and problem-solving

#### **Learning Outcome:**

S1 Term 1 Topic: Measurements in Physics. Understand how to estimate and measure physical quantities: length, area, volume, mass and time.

S4 Term 1 Topic: Introduction to Current Electricity. **Recognise, understand and apply knowledge of series and parallel circuits.** 

### **S1 Activity**

In groups, learners should talk about how to measure length, area, volume, mass and time, linking to what they know from their mathematics learning. They should examine different tools for making measurements, exploring how to use each accurately, eliminating error as far as possible. Learners should create quizzes that check for understanding in relation to which tools to use for a range of authentic measurements such as the height of the door, the capacity of a container or the area of the classroom. Learners should discuss the value of estimating quantities first, describing how this helps to eliminate error.

### **S4 Activity**

In groups, learners plan and report on an investigation, using an electric circuit with batteries and bulbs, to explore the electrical conductivity of different materials (e.g. copper, wood, plastic, iron, aluminium, graphite, rubber, cardboard, glass, wool). They should begin by developing a range of hypothesis about what might happen and why this should be the case. They should evaluate these predictions at the conclusion of their investigations in order to consider how well they were able to draw upon what they already knew to establish possible outcomes.

### S4 is a more complex context because...

This context is more complex because it requires the learner to use more sophisticated electrical equipment and make more sophisticated predictions about a range of possible outcomes.

#### Other supporting Generic Skills:

Calculation and ICT to use numbers and measurement correctly to describe results of experiments. Communication to share ideas about how different measuring tools can be used.

#### Other supporting Generic Skills:

Calculation skills are needed in order to make reasonable predictions about possible electrical outputs. Communication skills are also required to negotiate with a partner about how to build new circuits according to the parameters presented to them.



### Learning Area: Art and Design Key Generic Skill: Communication

#### **Learning Outcome:**

S1 Term 1 Topic: Exploring the Natural Environment. **Understand the ways in which the natural environment influences art in the community.** 

S4 Term 1 Topic: Making Paper Beads. Generate ideas for creating artworks drawn from the cultural environment.

# S1 Activity

Learners are challenged in small groups to research and discuss aspects of the natural environment. They should attempt to come up with an extensive list of contrasting features of the environment in their locality, considering colour, shape, form, pattern and size. From this small group discussion, they should then develop a class discussion about the extent to which these features of their environment are reflected in local art works that learners know of. They should consider dance, paintings, pottery and music for example to explore where the natural environment might be reflected.

## **S4 Activity**

Learners observe as the teacher, or if possible, a local jewellery maker, demonstrates how to make paper beads, assembling strings to make a simple piece. Learners should pay close attention to the making process and ask relevant questions to clarify the process and to gain an insight into the traditional aspects of this craft. Learners should then work in pairs to design their own paper bead necklace. They should explore other designs and produce a number of ideas before they agree on a final design. They should work together to create the necklace, ensuring that they help each other by referring back to what they learnt during the demonstration.

### S4 is a more complex context because...

Learners have to listen to and watch carefully the paper bead demonstration in order to be able to make their own art piece successfully. In pairs, learners have to be critical of the process that they follow in order to create a satisfying final design for their necklace. This kind of constructive criticism takes more complex communication skills as it must appear supportive and encouraging rather than very negative and 'complaining'.

#### Other supporting Generic Skills:

Critical thinking and problem solving skills are required in order to identify and then select relevant dance moves. Co-operation is also needed in order to practice and explore new dance pieces.

#### Other supporting Generic Skills:

Creativity is needed to compose and create a design for the necklace. Co-operation is needed in order to work effectively in pairs to produce the design.



### Learning Area: History and Political Education Key Generic Skill: Communication

#### **Learning Outcome:**

S1 Term 1 Topic: Independence Struggle for Uganda. Know the various approaches used by people of Uganda to demand for their independence from colonial rule.

S3 Topic: System of Government. Know the main differences between a country, nation, state and government.

## **S1 Activity**

As a whole class, begin by exploring what learners already know about how Eastern Africa gained independence from colonial rule. Identify what seem to be the key features of how independence was gained and refer to a summary of this form encyclopaedia listings if possible. Identify two main aspects of how change was achieved and split the class into two halves, assigning each group with one aspect. Ask them to talk in pairs within their half, and build some arguments for their own perspective and against the perspective of the other half of the class.

Hold a whole class debate to explore how the process of independence from colonial rule, shaped the future of Uganda.

## **S4 Activity**

Learners work in small groups to prepare a short presentation about the differences between a country, nation, state and government. They should work together to organise a presentation that includes a range of facts, illustrations and examples that aim to engage their audience well.

### S4 is a more complex context because...

In this situation, learners are encouraged to create a presentation more independently rather than as a whole class or in pairs. This will mean more negotiation between group members and the need to communicate effectively in order to persuade others, responding with relevant answers and further questions.

### Other supporting Generic Skills:

Critical thinking and problem-solving skills are developed as learners consider this issue from different perspectives.

# Other supporting Generic Skills:

Co-operation and Learning skills will be required in order to organise and deliver the presentation to others. Some ICT may also be required in order to interpret and interrogate data about resource conservation.



### Learning Area: Christian Religious Education Key Generic Skill: Communication

#### **Learning Outcome:**

S2 Topic 1: Respect for Human Life Independence Struggle for Uganda. Appreciate Christian teaching of human dignity and respect for life.

S4 Term 3: Conflict Resolution. Appreciate the role of Christianity in conflict resolution.

# S1 Activity

Learners begin by working as a whole class, led by the teacher, to discuss the issue that being human is not conditional to one's status, level of education, wealth and religion. Building on from this discussion, learners should work in pairs to explore provided examples of passages in the bible that illustrate Jesus' attitude towards dignity. They should prepare a short role play to illustrate what they have found, in the form of a child asking their parent about what it says in the bible about dignity.

# **S4 Activity**

Learners should work in small groups to discuss the role of the church in conflict resolution. They should begin by describing situations that they know about, asking each other useful questions to clarify links between bible passages and Christian values and the way that conflicts were managed. Learners should then move to create a short piece of drama that illustrates the way that a church leader could support conflict resolution though mediation, by providing an opportunity for both sides to present their views respectfully etc

### S4 is a more complex context because...

Learners are challenged to work as a group rather than only in pairs. This requires a more delicate negotiation of what their work should look like through good explanations and justifications. Learners are also further challenged by the fact that they have to identify features of conflict resolution for themselves rather than being guided by the provided bible passage as in the S2 example.

#### Other supporting Generic Skills:

Co-operation and Learning skills are used here in order to work effectively in pairs to compose, practise and perform the role play.

# Other supporting Generic Skills:

Critical thinking and problem-solving skills are required here to analyse conflict situations in the community and suggest strategies to prevent further conflict.



### Learning Area: Food and Nutrition Technology Key Generic Skill: Creativity and Innovation

#### **Learning Outcome:**

S2 Term 2 Topic 12: Processing and Preservation of Fruits. Preserve fruit by drying.

S4 Term 2 Topic 24: Processing Meat, Fish and Poultry Products. **Process meat by mincing, smoking, curing and grinding.** 

# S1 Activity

A selection of fruits are provided to small groups of learners. The group has to select 3 or 4 fruits which they believe would be suitable for drying. Based upon prior learning and existing knowledge of strategies for preserving foods, learners have to create a suitable process for drying the fruits that they have selected. They should work together to plan and describe in detail the drying process which should include descriptions of suitable containers, locations of containers, quantities and measure of fruit and durations for each stage of the process.

Learners should create a range of shapes for the fruits so as to experiment with the most successful way of drying and should also consider which methods for drying would conserve nutrients the most effectively.

# **S4 Activity**

Learners should work in small groups in response to a challenge to create sausages for a community gathering. Learners should begin by working in pairs to carry out some research into how sausages are made including the benefits of combining meats and using left-over meat from previous dishes. They should experiment to discover the best kind of mixture and cooking processes for sausages to be made effectively. Learners should allow other learners to taste their sausages in order to gain some feedback about the taste and texture of their sausages, and they should use this feedback to create a final version of their recipe and cooking process.

### S4 is a more complex context because...

This activity requires quite a high degree of research, experimentation and recording in order to be able to refine the recipe for making sausages. Learners need to be able to use what they already know about cooking meat to inform these new recipes and they also need to respond to feedback from other learners appropriately.

#### Other supporting Generic Skills:

Co-operation when working together to agree processes and equipment. Critical thinking and problem-solving when identifying suitable features of other preserving processes for this activity.

#### Other supporting Generic Skills:

Co-operation in order to produce a final recipe for the process of making sausages. Critical thinking and problem-solving in order to plan and carry out their research and experiments.



### Learning Area: Modern Foreign Languages Key Generic Skill: Co-operation and learning.

#### **Learning Outcome:**

S2 Term 3 Topic 2.4: The Environment

b) Talk about the advantages and disadvantages of living in different locations and express personal opinions.

S4 Term 3 Topic 4.4: Global Issues

b) Recognise and respond to important themes and ideas in relation to global issues.

## **S1 Activity**

Learners begin by working in pairs to talk about what they appreciate in their locality in English. They should then make groups of 4 – 6 to share their ideas, writing key words on cards to describe features of their locality in the Modern Foreign Language. In these small groups, learners should move on to talk about threats to their locality, paying particular attention to environmental features such as the river, mountains and farm land. They should create short phrases in the MFL that would encourage others to protect and respect the environment. Using images found in local and national magazines and newspapers, learners should select some pictures to illustrate their phrases relating to the protection of the environment.

## **S4 Activity**

In small groups, learners should gather media headlines about global issues such as famine, climate change, migration and trade. They should discuss the headlines, researching any vocabulary that is unfamiliar to them. They should rank the headlines according to which they believe would most likely attract the attention of readers. Then, they should work on a global issue of their choice, composing a selection of headlines that would encourage readership. Learners should prepare a short presentation for the rest of the class about their chosen global issue based on the headlines that they have composed, inviting the class to vote for the more effective headline.

### S4 is a more complex context because...

This S4 activity requires groups of learners to debate and agree upon a range of issues during the activity itself. They have to explore and select headlines to begin with which is quite straight forward, but then to rank the headlines will require learners to explain their views, listen to the views of others and finally come to a conclusion about which headlines are the most striking. In composing their own headlines, learners will have to work together to draw upon language that they know collectively, and create new phrases, deciding together which would be the most effective.

#### Other supporting Generic Skills:

Critical thinking and problem-solving skills will be developed in order to explore and examine evidence of environmental threats and select appropriate pictures.

#### Other supporting Generic Skills:

Communication skills will be needed to share effectively own knowledge of vocabulary relating to global issues. Critical and creative thinking will also be required in order to select the most striking phrases.

