Lesson plan

<table>
<thead>
<tr>
<th>Lesson theme</th>
<th>Nutrients and good health</th>
<th>Grade</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>30 to 40 minutes</td>
<td>Date/week</td>
<td></td>
</tr>
</tbody>
</table>

**Context**
- Ways in which to improve health and wellness.

**Linking with previous lesson**
- Integrate the nutrition and physical activity knowledge the learners gained in the previous 4 lessons.

**Core knowledge**
- Same theoretical base as for lessons 1 to 4
- Carbohydrates are energy-producing fuels, while proteins are the building blocks important for muscle strength.

**Learning activities and assessment**

**Group work:**
- Warm-up
- Invasion game: involves catching, throwing and running
- The food group shuffle: Helps learners remember the different types of food groups
- Cool-down.

**Individual work**
- Introduce learners to the worksheet for lesson 5: learners cut out pictures of foods representing carbohydrates, proteins and fats and paste these onto 3 separate columns on a page.

**Forms of assessment**
- Observe learners while they play
- Worksheet.

**Resources**
- Large flat area, such as a grass area, the school quad or a netball or volleyball court
- Soccer balls or netballs
- Whistle
- Magazines
- Paper
- Scissors
- Glue
- Worksheets.

**Teacher reflection**
- The activities help reinforce what learners have learnt about leading a healthy lifestyle thus far, in a fun and meaningful way.
Lesson 5: Nutrients and good health (30 to 40 minutes)

1 Outcomes
By the end of this lesson the learners should be able to:
• Explain the functions of macronutrients and how they can influence physical activity and sporting performance
• Identify which foods provide which macronutrients
• Explain the difference between cardiovascular fitness and strength training and give suggestions on how to improve these components of fitness.

2 Teacher’s corner
Most of lesson 5 is theory and integrates the previous lessons, including the outcomes from grades 1 to 3.

Nutrition component
The main focus of this lesson is to make sure the learners know that carbohydrates are the energy-producing fuels, while proteins are the building blocks important for muscle strength. Help the learners identify the foods that mainly contain carbohydrates, proteins and fats. You can use empty wrappers, boxes, containers or get each learner to use their lunch as a reference.

There are ‘good’ and ‘bad’ fats and fats give energy and have some important functions. But too much of the ‘bad’ fats can lead to health problems such as high cholesterol, heart attacks and strokes.

Physical activity component
You should emphasise that endurance activities such as cycling and running require more carbohydrates, but that protein is needed to build and replace muscle tissue.

Fats are sometimes important sources of energy, especially for ultra-endurance events such as iron-man triathlon events or multi-stage races that take place over a few consecutive days.

3 Activities
For activity 3 you’ll need the following equipment:
• Large flat area: a grass area or the school quad or a netball or volleyball court
• Soccer balls or netballs
• Whistle
• Magazines
• Paper
• Scissors
• Glue.

Divide the learners into 2 groups at the beginning of the lesson. They must remain in these groups for activities 1 and 2.

Activity 1: Warm-up (5 minutes)
Choose a warm-up activity from the list of warm-up and cool-down exercises. Warm-up exercise 3 is a good choice for this lesson.

Activity 2: Invasion game (10 minutes)
Divide the class into 2 teams and pick a leader for each team. Each team should be on a half court and they have to stay in their own half court.
• The group leader must pick 2 people to go down to the other end to be catchers. The catchers have to stay behind the end line. They cannot go into the other team’s half court.
• The objective of the game is for the players on one half of the court to throw the ball to their catchers on the other half. Every time the catcher gets the ball, their team scores a point. After they score a point, the catcher should try to throw the ball back to his or her team mates.
• The other team can try to block the throw on both ends, as long as they stay on their half court.
• The other team will also have 2 catchers.
• The first team to get 20 points, wins.
• You can make up new teams after the first game or continue and play the best of 3 games.

Other options
• You can vary the number of catchers or have teams switch half courts after each game.
• You can divide the class into 4 groups and have 2 games running at the same time on different playing areas.

Activity 3: The food group shuffle (5 to 10 minutes)
Have all the learners sit in a big circle. Give each learner the name of a food – bread, cereal, meat, chicken, butter and oil.

Level 1
When you call out a particular food, for example cereal, all the ‘cereals’ have to jump up and swap places with another ‘cereal’. They are not allowed to go back to their same spot.

When you shout ‘food group shuffle’, then all the foods (learners) need to jump up and swap places with someone else.

Level 2
Instead of calling the name of the food, call the name of the food group. When you call ‘carbohydrates’, the bread and cereal learners must jump up and change places. Similarly, you can call ‘protein’ and ‘fats’. When you call ‘healthy balance’, all the learners must jump up and swap places.

Activity 4: Back in the classroom (5 to 10 minutes)
Ask the learners to cut out pictures of foods representing carbohydrates, proteins and fats and paste them into 3 separate sections or columns on a page. This activity must be completed at home, but you must give them clear instructions in class.

Activity 5: Cool-down (3 to 5 minutes)
Choose a cool-down exercise from the list of warm-up and cool-down exercises.

Wrap-up (5 minutes)
Remind the learners what cardiovascular fitness and strength training are and provide examples of activities that require these components of fitness.
Revise the main functions of carbohydrates, proteins and fats. Make sure the learners understand the worksheet and what they need to do at home.
Grade 4

Worksheet: Grade 4, lesson 5

Task 1: Matching

A: Carbohydrates:
1. Carbohydrates are the building blocks for endurance activities.
2. Cut and paste 3 pictures of foods rich in carbohydrates in the blocks below.

1. Write down 2 physical activities that require mainly carbohydrates for fuel.

B: Proteins
1. Proteins are the building blocks of muscle tissue.
2. Cut and paste 3 pictures of foods rich in protein in the blocks below.
C: Fats:
1. Fats also give energy, but too much fat will harm the body.
2. Cut and paste 3 pictures of foods rich in fats in the blocks below.