

SAMPLE LESSON PLAN

Grade 7 Term 3 Unit 1- Protecting and Conserving Resources in the Business Environment

Lesson Plan:

Grade:	7
Subject:	Business Basics
Topic	Ergonomics in the working environment
Lesson Duration:	1 Hour
Big Idea:	Ergonomics equals in healthy and productive workers
Purpose of the lesson:	This lesson enables students to be aware of the ergonomic principles and practices in an office environment.
Problem Statement:	Employees are expressing concerns about their health, productivity and safety in regards to inappropriate office furniture and equipment.

Learning Objectives: Students will learn to:

1. Define the terms ergonomics, ergonomics hazard, office layout, safety and protection
2. Outline the standards for creating an ergonomically friendly environment.
3. Identify appropriate furniture and equipment to ensure health, safety and increased productivity

Strand: Innovation and Creativity

Attainment Target 1:

Students will:

- Brainstorm to identify appropriate equipment and furniture to create a comfortable working environment
- Use expressive language to describe the process of creating an ergonomically friendly environment

Strand: Explore Methods and Procedures

Attainment Target 2:

Identify the factors which must be considered when establishing an ergonomically friendly environment

Strand: Apply Solutions

Attainment Target 3:

Create a visual image of an ergonomically friendly working environment

Strand: Career Pathways

Attainment Target 4

Students will:

Identify technological applications in creating a comfortable office environment

Science Standards:

Strand 1 Exploring Science and the Environment – Earth Resources Grade 6

Student should recognize how some activities can harm the environment

Mathematics Standards:

Strand Measurement – Grade 5 students should use the correct units, tools and attributes to estimate, compare and carry out the processes of measurement to given degrees of accuracy

Technology Standards:

T and S standards 1 and 5

Student will develop an understanding of the effect of technology on the environment.

Students will develop an understanding of the characteristics and scope of technology.

Content Outline:

- Definition of terms: ergonomics, safety, protection and office layout.
- Standards for establishing an office environment to ensure increase productivity and protection of employees.
- Features of an ergonomically friendly business office.
- Appropriate furniture and equipment to create an ergonomically friendly business environment.

key Skills:

- o Dramatize to express ideas
- o Interpret presentation and discuss problems
- o Observe, analyse and make judgement

Resource Materials:

Internet access, textbook, poster, information sheets, computer, Multimedia projector, internet access.

Tools/materials/equipment

Pens, pencils, notebook, Computer, tablets

Classroom Safety e.g. Students will

Use tools and equipment in a safe manner and assume responsibility for their safety and safety of others.

Demonstrate courtesy in regards to the ideas expressed by classmates and will show appreciation for the efforts of others.

Learning Outcome:

Students will:

- Know the health issues that can arise as a result of poor ergonomic conditions
- Demonstrate skills to create an ergonomically friendly office environment
- Form opinions and make decisions about how to use resources for environmental sustainability.

Activity Highlights

Engagement

Student will participate in a role play depicting employees expressing frustration about the effect of the inappropriate furniture and equipment to their health, safety and productivity.

Discuss the role play and identify the issues which contribute to workers' dissatisfaction.

Exploration

Student will use the textbook/resource materials to define the terms ergonomics and ergonomic hazards. Using information provided in the role play, student will discuss the ergonomics hazards depicted.

Using the internet, textbooks and other resources available, students will identify factors to consider in creating an ergonomically friendly office environment and explain the impact of ergonomically unfriendly environment on worker's health and safety. The following YouTube view may be used <https://www.youtube.com/watch?v=ZCIZf9UhNFI>;
<https://www.youtube.com/watch?v=LXOODWg1fbs>

Explanation

Student will view the picture or video showing an ergonomically unfriendly office environment. They will identify ergonomically unfriendly issues and make recommendations to create a more ergonomically friendly office.

Extension

In groups students will orally present the standards for an ergonomically friendly environment using appropriate ICT tools eg. Power point.

In groups of five, students will create a manual of an ergonomically friendly environment.

- Definition of terms
- Standards for creating an ergonomically friendly environment
- Layout of the office (design)
- Appropriateness of furniture and equipment
- Disposal of damaged and obsolete equipment

Evaluation (solution)

Use checklist to assess the manual in terms of accuracy of information (definition of terms, list of standards, creativity of the overall design and layout.

Enrichment

Student will conduct research on the effects of computer uses on eye strain, tendonitis, safety issues example radiation from monitor.

Lesson Evaluation

Lesson Resources

Exercise 1.

- a) Examine the following picture and identify the ergonomic hazards
- b) Make recommendations to improve the safety of the office.

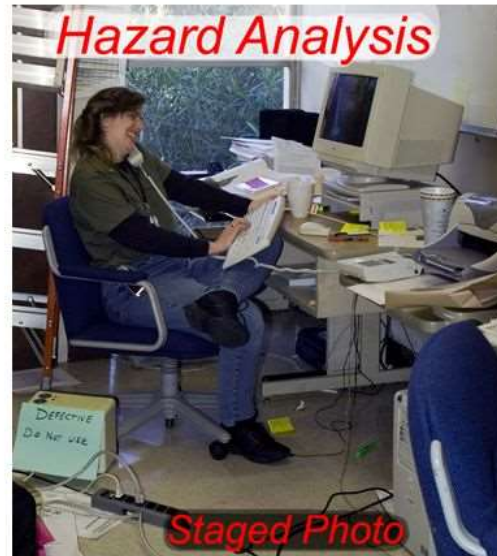
Hazard Analysis



Staged Photo

Office Hazards

- Here are a few:
 - Poor housekeeping
 - Trip hazard
 - Daisy chained power strip
 - Poor desk layout
 - Poor computer location
 - Bad posture and seating
 - Ladder stored poorly



Exercise 2

- a) Examine the picture below and identify some possible health and safety issues that may occur because of the office layout.
- b) Recommend corrective measures that may be implemented to improve the safety of the office space.

