

BA SANGAM COLLEGE
YEAR 11
APPLIED TECHNOLOGY
WORKSHEET 2

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| Subject: Applied Technology | Year/Level: 11 | |
| Week: 2 | Lesson 4 | Date: |
| Topic: Basic Home Improvement (Processes in Floor Tiling) | | |

LESSON PREPARATION:

- Prepared lesson notes
- prepared follow up work

PREVIOUS LEARNING/PRIOR ASSOCIATED LEARNING:

Students have some brief knowledge on the mixing of concrete where it relates to floor tiling with the merging of composites and mixing them together.

LEARNING OBJECTIVES:

At the end of the lesson, students should be able to:

Cognitive Domain:

- 1 Know the sequence of the step starting from the first step to the last step of tiling tiles.

Psychomotor Domain:

- 1 Apply the steps given when lying of tiles.

Affective Domain:

- 1) Appreciate the application of floor tiling.

TEACHING RESOURCES (MATERIAL AND VISUAL AIDS)

- Lesson notes

FOLLOW UP WORK:

- Students Activity

LESSON NOTES:

Processes in Floor Tiling:

The following information is a brief description of the steps involved in using the thin set method to install tile. It is not meant to be an instruction manual; rather, it will familiarize you with the basic steps involved in installation.

Subfloor preparation:

This is the most important step in accomplishing a satisfactory installation. The subfloor must be structurally sound, rigid, smooth, flat, and free of curing compounds and waxy or oily films.

Floor Layout:

In this step, the room is squared off and measured, and the chalk lines are snapped. Once the chalk lines are in place, the installer will verify the floor in both directions to balance the room.



Preparing the Tiles:

Slight tone variations are to be expected from tile to tile. A good installer will prevent this from becoming a problem by mixing the tiles from several cartons before installation. This blends the tiles together, and any shade variations add to the character of the floor.

Spreading the Thin Set:

Using the chalk lines as a guide, the installer will begin applying the thin set in one section at a time. He will spread one coat using the flat side of the trowel and then immediately come back with a second coat, using the notched side of the trowel.



Laying the Tiles:

The tiles are then placed one at a time in the thin set by twisting and pressing while allowing appropriate spacing for the grout. A straight edge or spacers may be used to align the tile.



Grouting:

The installer will generally begin grouting the following day. It is important to allow the thinnest enough time to set up before applying the grout. The grout is applied over one small section at a time and is spread by means of a rubber float or a squeegee. Pulling the grout firmly over the surface will both push the grout into the joints and clean off most of the excess grout. Then the tile is rinsed using a damp sponge. Very little water is applied. After approximately ten minutes the surface of the tile is cleaned again with a damp sponge (even drier this time), or on some shiny tiles, just buff with a dry towel



STUDENTS ACTIVITY:

1. Briefly explain all the things that are done for the subfloor preparation.

2. Explain the activities that are carried out when spreading the thin set.

3. Explain the grouting process in floor tiling.

4. Name a common adhesive that can be used to fix the tile.

Reference:

Year 11 Applied Technology Textbook, MEHA.

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|--|-----------------------|--------------|
| Subject: Applied Technology | Year/Level: 11 | |
| Week: 2 | Lesson 5 | Date: |
| Topic: Basic Home Improvement (TILING MATERIALS, Tiling Tools & Tiling Safety) | | |

LESSON PREPARATION:

- Prepared lesson notes
- prepared follow up work

PREVIOUS LEARNING/PRIOR ASSOCIATED LEARNING:

Students have some ideas on some of the component that are merged together in order to come up with electricity. They know that copper is one of the component available for the conduction of electricity and many others.

LEARNING OBJECTIVES:

At the end of the lesson, students should be able to:

Cognitive Domain:

- 1 Know the types of materials used in Tiling and the different types of tiling tools.

Psychomotor Domain:

- 1 Identify the name of the tools and its uses.
- 2 Recognize the application of each materials and the tiling tools

Affective Domain:

- 1) Appreciate the application of the different materials in real life situation with the support of the tiling tools.

TEACHING RESOURCES (MATERIAL AND VISUAL AIDS)

- Lesson notes

FOLLOW UP WORK:

- Students Activity

LESSON NOTES:

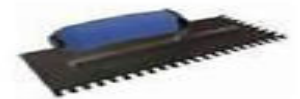
Tiling Materials:

1. Tiles
2. Thin-set mortar
3. Grout

Tiling Tools:

Notched Trowels

A notched trowel is necessary when applying tile. They're used to make sure that you apply the proper depth of setting material to the surface. Notched trowels come in different sizes and depths as well as in rectangular or V-shaped notches.



Grout float

A grouting float is a flat, rectangular piece of metal with a handle on the top that is used to apply grout to a tiled floor. The float is used during one of the final stages of the tiling process and is relatively simple to use.



Nippers:

A Nipper is a tile tool that's primarily used to make circular cuts in ceramic tile that are difficult to accomplish.



Spacers:

People use spacers to keep each tile an equal distance apart as they install it on your wall, floor or countertop. When you install tile yourself, spacers make it possible to keep straight grout lines and square tiles together as the adhesive dries.



Sponge:

A sponge and water is to clean off the tile surface and should be kept clean



Tile Cutter:

The tile cutter is an excellent inexpensive tool use to make precise straight cuts in ceramic tile. The tile is placed into position in the cutter and is scored by firmly moving a tungsten carbide scoring wheel from bottom to top across the face of the tile surface. By then placing the pressure bar pad across the tile and applying firm and gently increasing pressure, the tile will snap across its score line.



Chalk Line:

Need a straight line to hang wallpaper, lay wood floors or put in ceramic tiles? You'll need a chalk line - a small, eye-shaped case filled with blue or orange chalk and string. It has a metal tab on one end for pulling chalk-coated string out, and a reel on the side for winding the string back in



Tape Measure:

A tape measure or *measuring tape* is a flexible ruler. It consists of a ribbon of cloth, plastic, fibre glass, or metal strip with linear-measurement markings. It is a common measuring tool. Its design allows for a measure of great length to be easily carried in pocket or toolkit and permits one to measure around curves or corners



STUDENTS ACTIVITY:

1. Write down the uses of the tiling tools given below:

a. **Notched Trowel:**

Uses:

b. **Grout Float:**

Uses:

c. **Nippers:**

Uses:

d. **Spacers:**

Uses:

Reference:

Year 11 Applied Technology Textbook, MEHA.