

Minecraft Self Portrait Math Worksheet
Area & Perimeter Investigation

Name: _____

Date: _____

Step 1: Look at Your Portrait

Your Minecraft-style self portrait is made from **small squares on a grid**.
Each square equals **1 square unit**.

Today you will investigate the **area** and **perimeter** of different parts of your portrait.

Part 1: Investigating Area

Area is the amount of space **inside** a shape.

To find the area, **count the squares inside the shape**.

Example:

If a shape covers 12 squares → Area = **12 square units**

Find the Area

1. **Hair**

Count the squares that make up your hair.

Area of hair:

_____ square units

2. **Face**

Count the squares inside your face shape.

Area of face:
_____ square units

3. Shirt

Count the squares in your shirt or clothing design.

Area of shirt:
_____ square units

4. Eyes (both together)

Area of eyes:
_____ square units

Thinking Question

Which part of your portrait has the **largest area**?

Part 2: Investigating Perimeter

Perimeter is the distance **around the outside edge** of a shape.

To find the perimeter:

1. Trace around the outside of the shape.
2. Count the **edges of the squares** around the shape.

Each edge = **1 unit**

Example:

If the outline has 20 edges → Perimeter = **20 units**

Find the Perimeter

1. **Hair**

Perimeter of hair:
_____ units

2. **Face**

Perimeter of face:
_____ units

3. **Shirt**

Perimeter of shirt:
_____ units

Thinking Question

Does the shape with the **largest area** also have the **largest perimeter**?

- Yes
- No

Explain why you think so:

Challenge Activities

Try these creative math challenges!

1. Shirt Designer Challenge

Draw a new shirt pattern that has:

Area = **20 square units**

Sketch your design here:

2. Shape Puzzle

Can you draw **two different shapes** that both have:

Area = **16 square units**

But **different perimeters?**

Shape 1 perimeter: _____ units

Shape 2 perimeter: _____ units

Reflection

What did you learn about **area and perimeter** by studying your artwork?

Great job! 🧠+

You just used **art and math together** to explore shapes, space, and design.