

Qualitative vs Quantitative Data

Qualitative Data

- Deals with descriptions.
- Data can be *observed* but not measured.
- Colors, textures, smells, tastes, appearance, beauty, etc.
- Qualitative → Quality

Quantitative Data

- Deals with numbers.
- Data which can be measured.
- Length, height, area, volume, weight, speed, time, temperature, humidity, sound levels, cost, members, ages, etc.
- Quantitative → Quantity



Example 1: Oil Painting

*texture shows brush strokes of oil paint



Example 1: Oil Painting

*surface area of painting is 140 sq. in.



Example 1: Oil Painting

*picture is 10" by 14"



Example 1: Oil Painting

*smells old and musty



Example 1: Oil Painting

*the painting costs \$300



Example 2: Latte

*the latte is in a mug that appears to be made of glass



Example 2: Latte

*12 ounces of latte



Example 2: Latte

*robust aroma



Example 2: Latte

*serving temperature 65° C



Example 2: Latte

*serving cup 7 inches in height



Example 3: Sa-Hali Students

*friendly demeanor



Example 3: Sa-Hali Students

*the student body
numbers 972 students



Example 3: Sa-Hali Students

*Most of the students self-identify as environmentalists



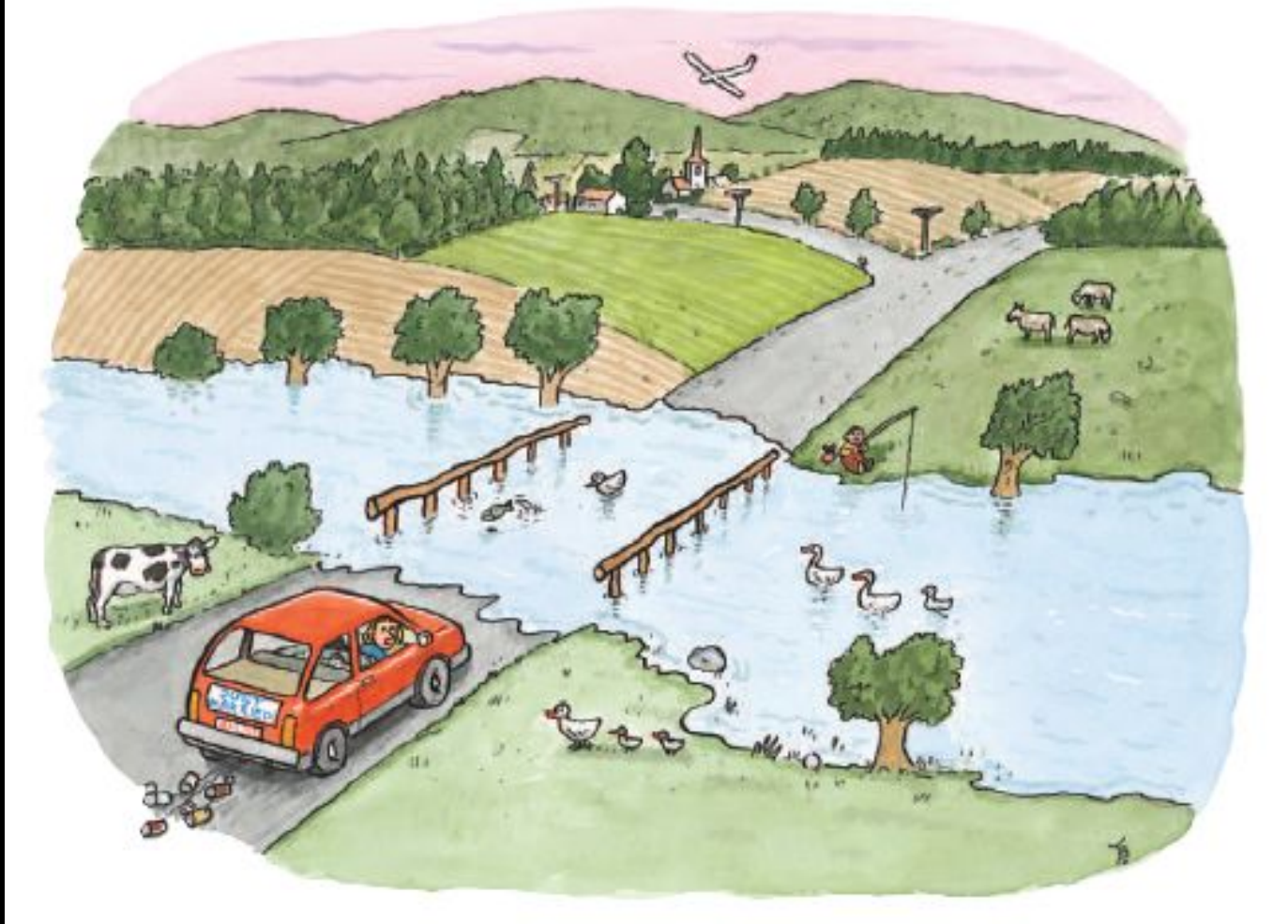
Example 3: Sa-Hali Students

*78% of students belong to a sports team or other school club



Example 3: Sa-Hali Students

*the school was built
in 1974



Make one qualitative observation about the picture above.
Explain why this is a qualitative observation.

Make one quantitative observation about the picture above.
Explain why this is a quantitative observation.



Make one qualitative observation about the picture above.
Explain why this is a qualitative observation.

Make one quantitative observation about the picture above.
Explain why this is a quantitative observation.