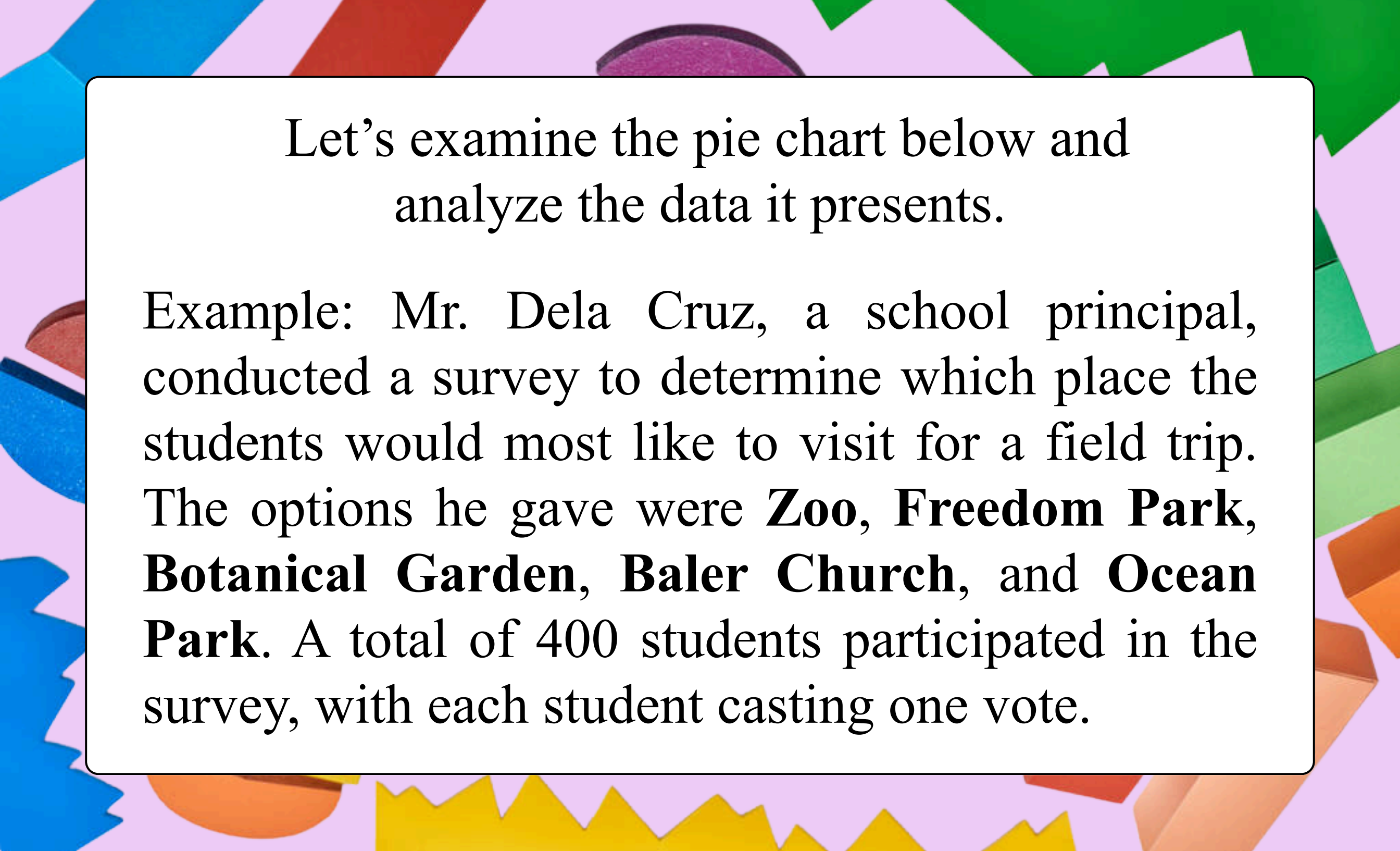
The background is a light purple color. It is decorated with various 3D geometric shapes. At the top, there is a yellow zigzag border. Scattered around the edges are several 3D pie chart slices in colors like orange, blue, yellow, and red. There are also 3D rectangular blocks in colors like orange, red, green, and blue. The text is centered in the middle of the image.

**SOLVING ROUTINE AND NON-ROUTINE  
PROBLEMS USING DATA PRESENTED IN  
A PIE GRAPH**



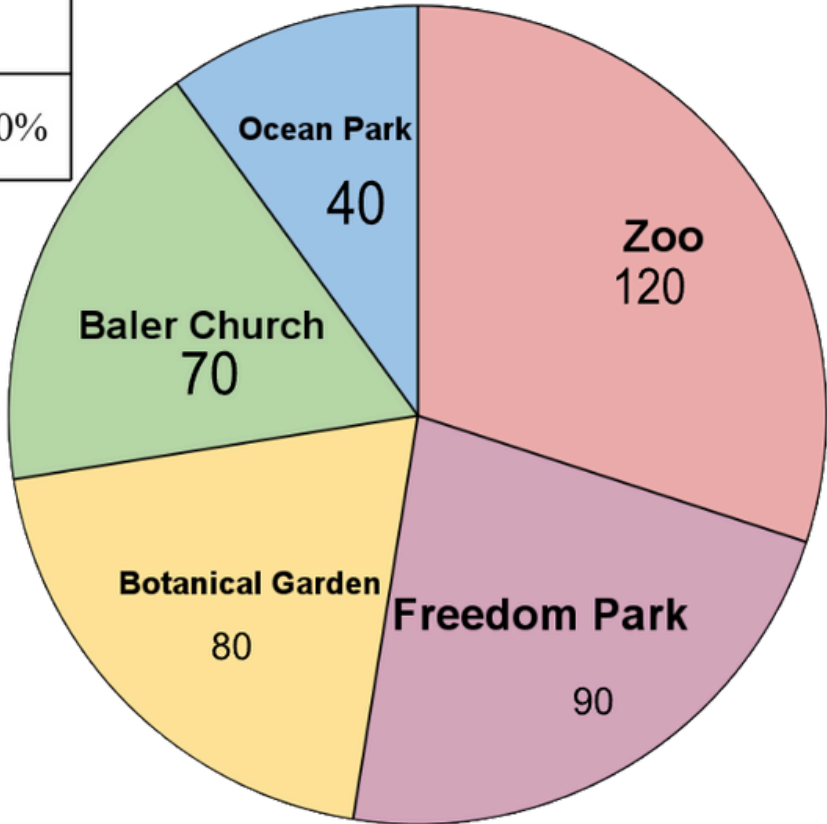
Let's examine the pie chart below and analyze the data it presents.

Example: Mr. Dela Cruz, a school principal, conducted a survey to determine which place the students would most like to visit for a field trip. The options he gave were **Zoo, Freedom Park, Botanical Garden, Baler Church, and Ocean Park**. A total of 400 students participated in the survey, with each student casting one vote.

Example: Mr. Dela Cruz, a school principal, conducted a survey to determine which place the students would most like to visit for a field trip. The options he gave were **Zoo**, **Freedom Park**, **Botanical Garden**, **Baler Church**, and **Ocean Park**. A total of 400 students participated in the survey, with each student casting one vote.

Destinations	Zoo	Freedom Park	Botanical Garden	Baler Church	Ocean Park
No. of pupils	120	90	80	70	40
Angle Sector	$\frac{3}{10}$ or 30%	$\frac{9}{40}$ or 22.5%	$\frac{1}{5}$ or 20%	$\frac{7}{40}$ or 17.5%	$\frac{1}{10}$ or 10%

$$\text{Angel sector} = \frac{\text{Frequency of data}}{\text{Total frequency}} \times 100$$



Destinations	Zoo	Freedom Park	Botanical Garden	Baler Church	Ocean Park
No. of pupils	120	90	80	70	40
Angle Sector	$\frac{3}{10}$ or 30%	$\frac{9}{40}$ or 22.5%	$\frac{1}{5}$ or 20%	$\frac{7}{40}$ or 17.5%	$\frac{1}{10}$ or 10%

Now let us answer some questions.

1. Which field trip destination got the highest percentage of votes?

Answer: The **Zoo** received the highest percentage of votes, accounting for **30% of the total pupils**, according to the data presented.

2. What percentage of pupils favor Zoo?

Answer:

To compute the percentage:  $\frac{3}{10} \text{ of } 100\% = \frac{3}{10} \times 100\%$       $30\% \text{ or } \frac{120}{400} = 30\%$   
 $= 30\%$  of the pupils favored the Zoo.

Destinations	Zoo	Freedom Park	Botanical Garden	Baler Church	Ocean Park
No. of pupils	120	90	80	70	40
Angle Sector	$\frac{3}{10}$ or 30%	$\frac{9}{40}$ or 22.5%	$\frac{1}{5}$ or 20%	$\frac{7}{40}$ or 17.5%	$\frac{1}{10}$ or 10%

Now let us answer some questions.

3. How many times more pupils prefer visiting the Botanical Garden than those who prefer visiting the Ocean Park?

Answer: Obtain the data for the pupils who prefer to visit Botanical Garden ( $\frac{1}{5}$ ) and those who prefer the Ocean Park ( $\frac{1}{10}$ ).

$$\frac{1}{5} \div \frac{1}{10} = \frac{1}{5} \times \frac{10}{1} \text{ or } \frac{80}{40} = 2$$

The number of pupils who preferred the Botanical Garden was twice that of those who preferred Ocean Park.

Destinations	Zoo	Freedom Park	Botanical Garden	Baler Church	Ocean Park
No. of pupils	120	90	80	70	40
Angle Sector	$\frac{3}{10}$ or 30%	$\frac{9}{40}$ or 22.5%	$\frac{1}{5}$ or 20%	$\frac{7}{40}$ or 17.5%	$\frac{1}{10}$ or 10%

Now let us answer some questions.

4. What percentage of the pupil's survey wants to go to Baler Church?

$$\text{Answer: } \frac{7}{40} \text{ of } 100\% = \frac{1}{10} \times 100\% \text{ or } \frac{70}{400} = 17.5\%$$

$$= \mathbf{17.5\%}$$

**= 17.5% of pupils like to go to Baler Church.**