

**Similar Shapes
Student Worksheet**

Name _____

Class _____

In this activity, you will

- ✓ Explore Similar Polygons/Similar Triangles

<u>Polygon ABCDE</u>	<u>Polygon PQRST</u>
AB=_____	PQ=_____
BC=_____	QR=_____
CD=_____	RS=_____
DE=_____	ST=_____
EA=_____	TP=_____

Write the following ratios. Write the ratios using the word “to”.

What is the ratio of AB to PQ? _____

What is the ratio of BC to QR? _____

What is the ratio of CD to RS? _____

What is the ratio of DE to ST? _____

What is the ratio of EA to TP? _____

What do you notice about the ratios?

Measures of:

$\angle ABC = \underline{\hspace{2cm}}$	$\angle PQR = \underline{\hspace{2cm}}$
$\angle BCD = \underline{\hspace{2cm}}$	$\angle QRS = \underline{\hspace{2cm}}$
$\angle CDE = \underline{\hspace{2cm}}$	$\angle RST = \underline{\hspace{2cm}}$
$\angle DEA = \underline{\hspace{2cm}}$	$\angle STP = \underline{\hspace{2cm}}$
$\angle EAB = \underline{\hspace{2cm}}$	$\angle TPQ = \underline{\hspace{2cm}}$

What do you notice about the angle measures?

Based on your findings, complete the following two statements.

Two polygons are said to be similar if:

1. Their corresponding sides are all in the ratio.
2. Their corresponding angles are in measure.