

Angles of a Triangle

Standards:

– Students will be able to verify a logical conjecture using appropriate geometric properties and theorems

You have learned that the angles of a triangle add up to 180° . Today you are going to verify that conjecture using what you know about angles and lines. Using a ruler, I would like to draw a large triangle on a piece of paper. Color in the three angles of your triangle so that you will be able to identify them later. Then, rip off the angles and tape them together, with all the vertices touching. Using the angles and your knowledge of geometry, write a paragraph explaining why the angles of any triangle will always add up to 180° .

	Poor	Good	Excellent
Angles are constructed correctly	Angles are not constructed correctly (1 pt)		Angles are taped together and constructed correctly (2 pts)
Explanation is complete and well-explained	Explanation is incomplete and confusing (1 pt)	Explanation is incomplete but understandable, or explanation is complete but is confusing (2 pts)	Explanation is complete and well-explained (3 pts)
Explanation uses appropriate geometric properties	Explanation does not use any appropriate properties (1 pt)	Explanation uses geometric properties, but not all of the necessary properties (2 pts)	Explanation correctly uses all appropriate geometric properties (3 pts)

Total score: _____ / 8