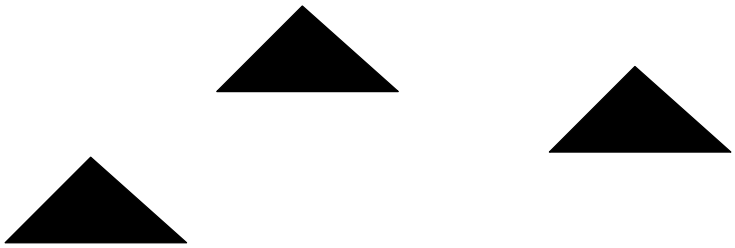
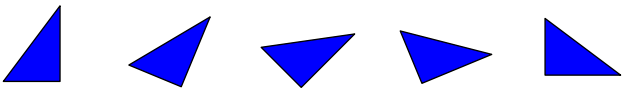
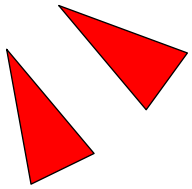
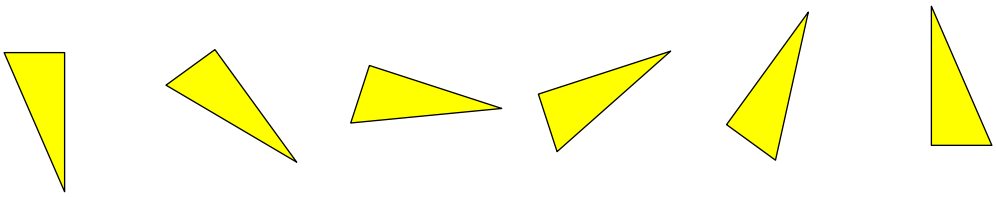
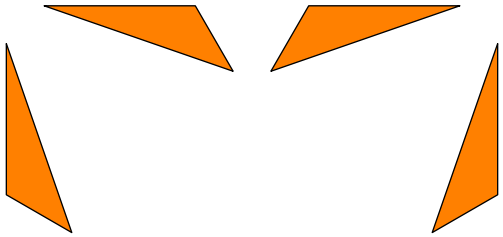


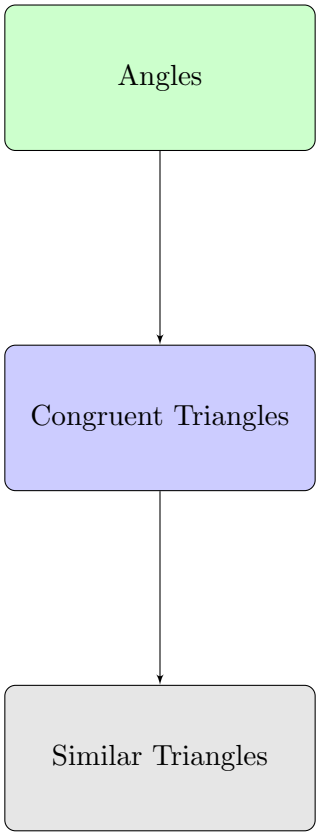








1 Road Map for Congruence

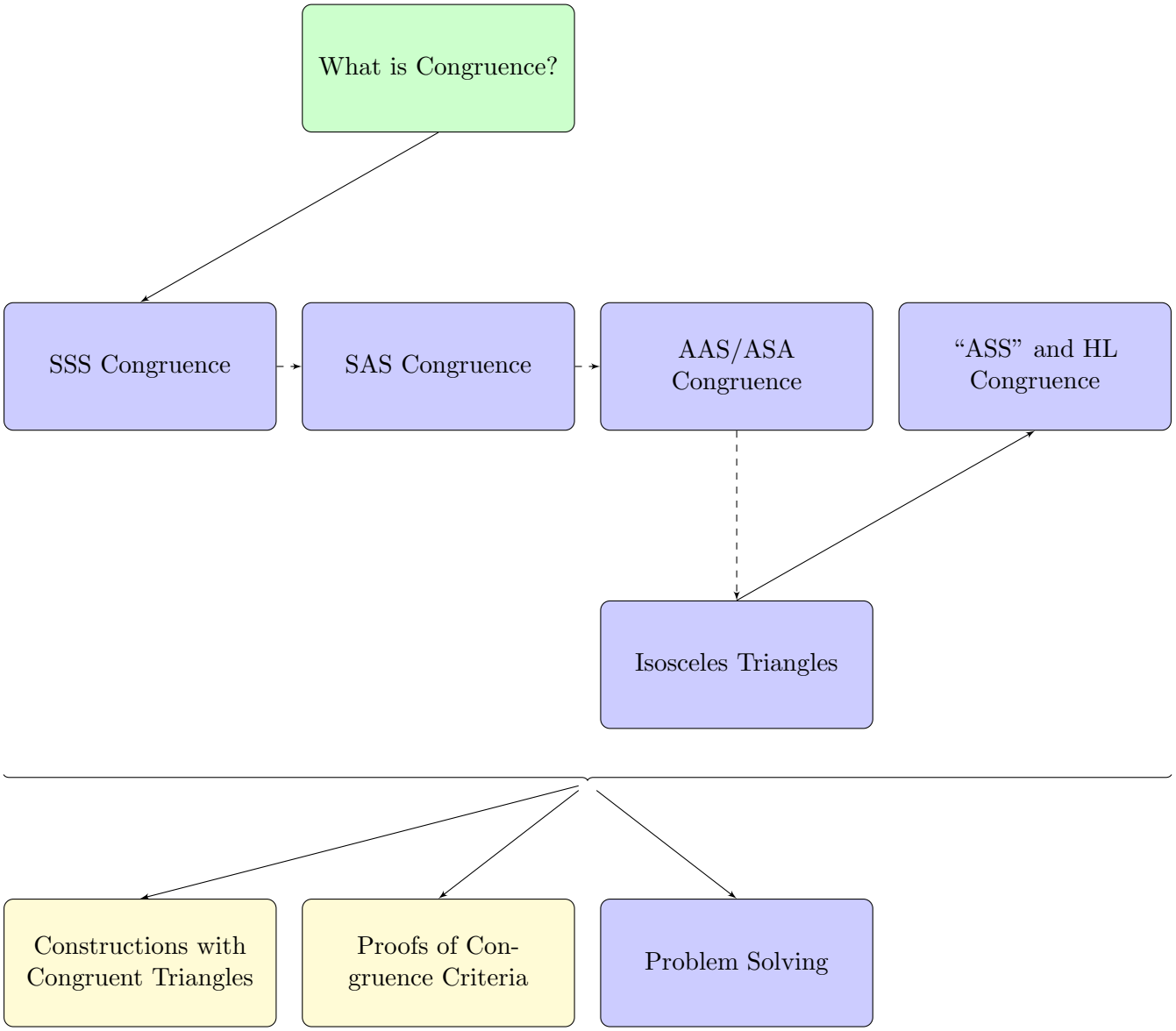


Now that you've learned about angles, it's time to talk about shapes. We'll answer the fundamental question: What does it mean for two shapes to be the same? We focus on triangles because they are, in a sense, the simplest polygons, and the building blocks of all other polygons.

We don't just care about what it means for two triangles to be the same, though. We want to know, what is the *minimum information* we need to know two triangles are the same? You'll discover the answers to these questions in this Cluster.

Start with the "What is Congruence?" cell. Then go through the lessons on the four different congruence criteria, with a small detour to learn about isosceles triangles. After you have learned all four criteria, try to tackle the Problem Solving section.

Proofs of the congruence criteria is optional; you may wish to return here when you have a better grasp of proof. We do recommend, however, that you learn about the constructions that congruent triangles allow you to do: copy angle, perpendicular bisector, and angle bisector.



Note that the lines point out the suggested order in which to go through the lessons, and do not point out the dependencies in the proofs of the criteria.