Points, lines and triangles
For Helpers

1. They can probably best do this by dropping a perpendicular from P to AB and then drawing a line through P perpendicular to the line they've just drawn. If they can do that they can even be taught how to do it without a set square.

2. It's a great circle: imagine cutting the grapefruit in half, through the centre, so that both the points you are interested in are on the cut edge, and then crawling round the edge, the short way.

3. It'll be bigger: if they take the north pole, a point on the equator and another point on the equator then they will get two right angles at the equator plus whatever they get at the pole.