## **Pivots**

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The world's been getting a bit turned around these days, but at least some locations know where they stand: N for North, S for South, and - for somewhere in the middle. What's more, I know someone on the equator will always have their compass point true.

Oh yeah, don't forget that ancient Greek saying: "Always 5 in the north, 5 in the south, and 10 on the equator."

Location									
Cape Town	-	S	N	-	S	N	-	-	-
Hanoi	N	S	-	S	-	-	N	S	-
London	-	-	-	N	-	N	S	-	N
Rio de Janeiro	S	-	-	N-	-	N	S	N	-

This flavor text is kind of nasty, so let's come back to it.

Looking at the diamond pieces confirms that they're the Earth. Cut and paste them together and (a while later) you get an icosahedral Earth with a disarray of letters on it.

The title and flavor text are telling us to spin the icosahedron around. One should realize that the ancient Greek saying is referring to the faces of the icosahedron (of which there are 20). So we're looking for orientations with 5 faces facing up and 5 down e.g. orientations "pivoting" on a single vertex; the 10 faces along the center of the icosahedron form the "equator".

The table gives you four cities, and nine columns of either North, South, or "in the middles". For each of these columns, there is a unique way to orient the icosahedron so that each face that contains a city lies in the proper region e.g. for the first column, Hanoi/southeast Asia among the top 5 faces, Rio/East South America in the bottom 5 faces, and Cape Town/main Africa and London/west Africa lying in the 10 equatorial faces.

Finally, for each orientation, the cluephrase "someone on the equator will always have their compass point true" should tell us that there's still a face on the equator where the letter points the right direction. Each orientation has a unique letter facing upright: taking these for each column spells the answer, **ENVELOPES**.

Location									
North Pole pivot									
Cape Town	-	S	N	-	S	N	-	-	-
Hanoi	N	S	-	S	-	-	N	S	-
London	-	-	-	N	-	N	S	-	N
Rio de Janeiro	S	-	-	N	-	N	S	N	-