## Astronomy Ranking Task: The Electromagnetic (EM) Spectrum

## Exercise \#2

Description: The figure below shows the visible portion of the electromagnetic spectrum with wavelengths indicated. The colors red, orange, yellow, green, blue, indigo, and violet are labeled as ROY G BIV.

A. Ranking instructions: Rank the wavelengths of the colors in the visible spectrum.

Ranking Order: Shortest 1 $\qquad$ 2 $\qquad$ 3 $\qquad$ 4 $\qquad$ 5 $\qquad$ 6 $\qquad$ 7 $\qquad$ Longest

Or, all colors of the visible spectrum have the same wavelength. $\qquad$ (indicate with a check mark)

Carefully explain your reasoning for ranking this way:
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B. Ranking instructions: Rank the frequencies of the colors in the visible spectrum.
$\qquad$ 2 $\qquad$ 3 $\qquad$ 4 $\qquad$ 5 $\qquad$ $6 \ldots \quad 7$ $\qquad$ Lowest Or, all colors of the visible spectrum have the same frequency. $\qquad$ (indicate with a check mark)

Carefully explain your reasoning for ranking this way:
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$\qquad$
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C. Ranking instructions: Rank the energies of the colors in the visible spectrum.

Ranking Order: Lowest 1 $\qquad$ 2 $\qquad$ 3 $\qquad$ 4 $\qquad$ 5 $\qquad$ 6 $\qquad$ 7 $\qquad$ Highest

Or, all colors of the visible spectrum have the same energy. $\qquad$ (indicate with a check mark)

Carefully explain your reasoning for ranking this way:
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D. Ranking instructions: Rank the speeds of the colors of the visible spectrum.
$\qquad$ 2 $\qquad$ 3 $\qquad$ $5 \ldots 6$ 6 7 ___ Slowest Or, all colors of the visible spectrum travel at the same speed. $\qquad$ (indicate with a check mark)

Carefully explain your reasoning for ranking this way:
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