1. Which electron configuration(s) is/are correct?

Cr atom: 1s<sup>2</sup>2s<sup>2</sup>2p<sup>6</sup>3s<sup>2</sup>3p<sup>6</sup>3d<sup>5</sup>4s<sup>1</sup> Cu atom: 1s²2s²2p<sup>6</sup>3s²3p<sup>6</sup>3d¹04s¹ **&** Fe<sup>2+</sup> ion: 1s<sup>2</sup>2s<sup>2</sup>2p<sup>6</sup>3s<sup>2</sup>3p<sup>6</sup>3d<sup>5</sup>4s<sup>1</sup>

1, 2 and 3

Only 1 and 2 B

Only 2 and 3

ions do Not fallow the same pathern: Fe<sup>2+</sup>: 15<sup>2</sup> 25<sup>2</sup> 2p<sup>6</sup> 35<sup>2</sup> 3p<sup>6</sup> 3d<sup>6</sup> 48

D Only 1

Your answer

[1]

Your answer

[1]

2. In the diagrams below, each box represents an orbital and each electron is shown as an arrow.

Which diagram shows the correct arrangement of electrons in an atom of carbon?

