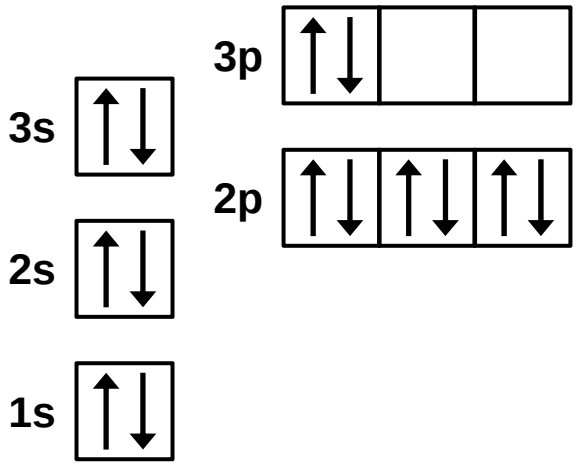
Chemistry Honors
WS Orbital Diagrams

Name	
Date	Period

1) An orbital diagram for silicon is shown on the right, however it contains a mistake.

What is the mistake?

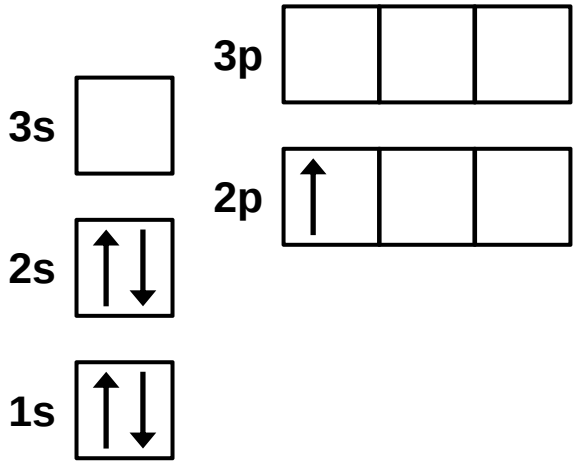
What rule of electron configurations does this violate?



2) An orbital diagram for boron is shown on the right. The fifth electron occupies the 2p orbital, not the 3s or 3p orbital.

What rule of electron configurations does this demonstrate?

What does this rule state?



3) An orbital diagram for nitrogen is shown on the right, however it contains a mistake?

What is the mistake?

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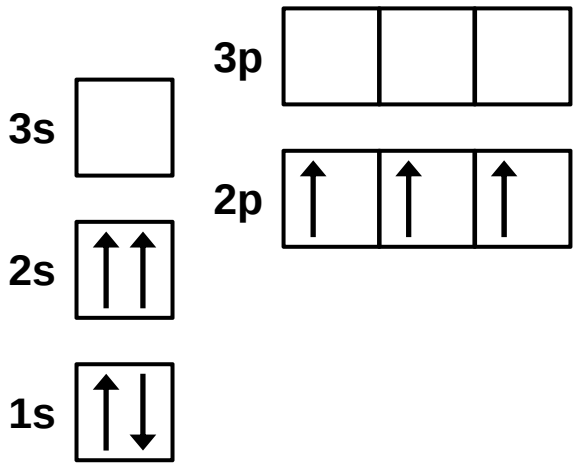

Draw the orbital diagrams for the following atoms:

4) Sulfur

5) Carbon

6) Sulfur dication

7) Fluorine dianion

8) Magnesium

9) Calcium trication

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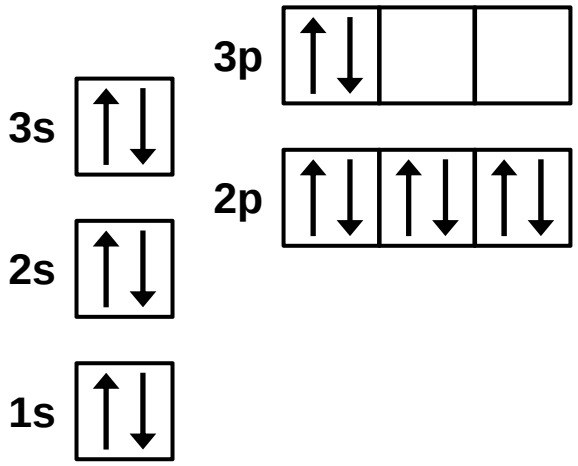

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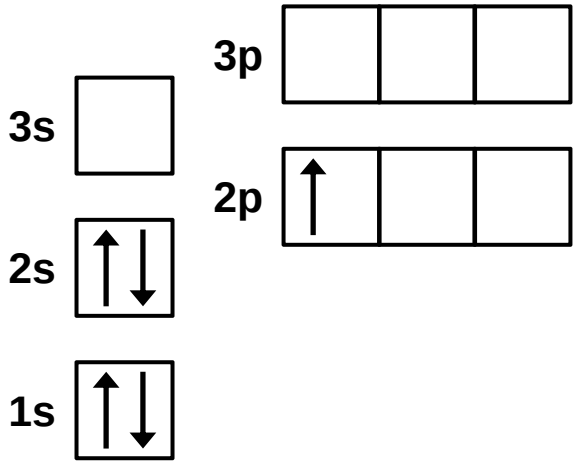

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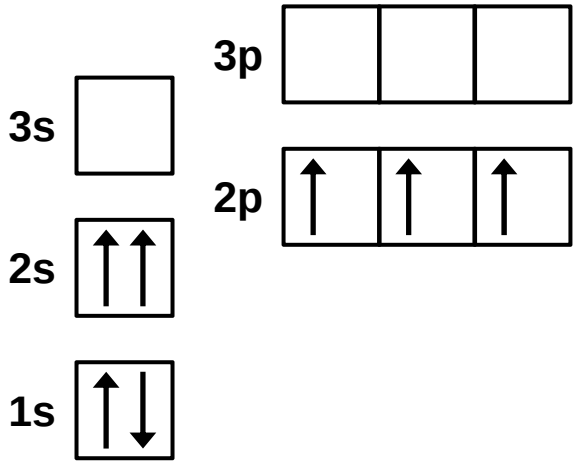

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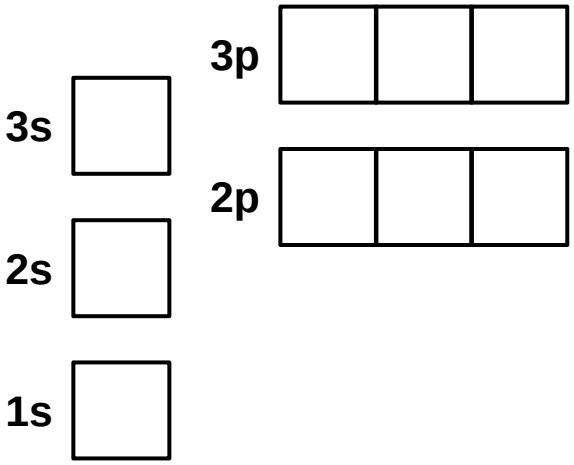
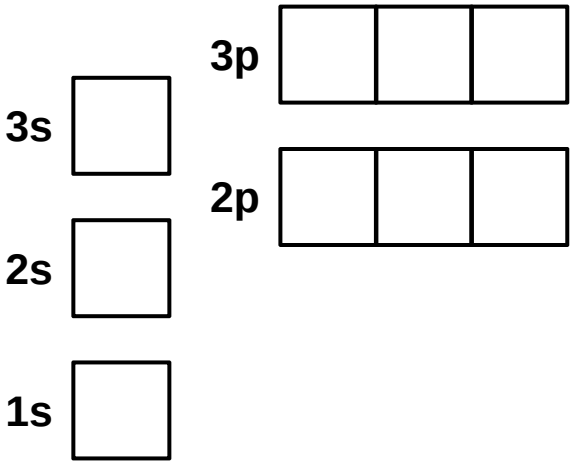


5) Carbon



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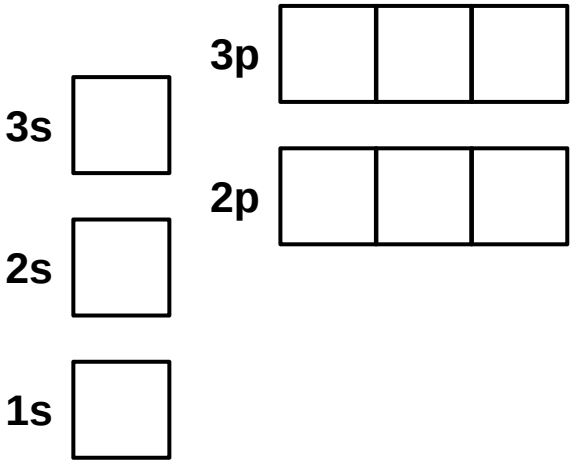

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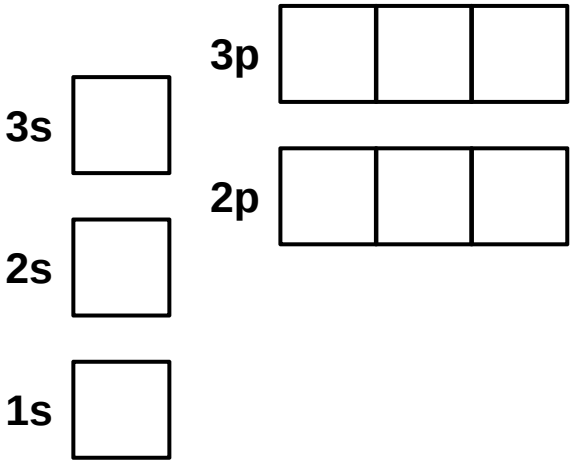
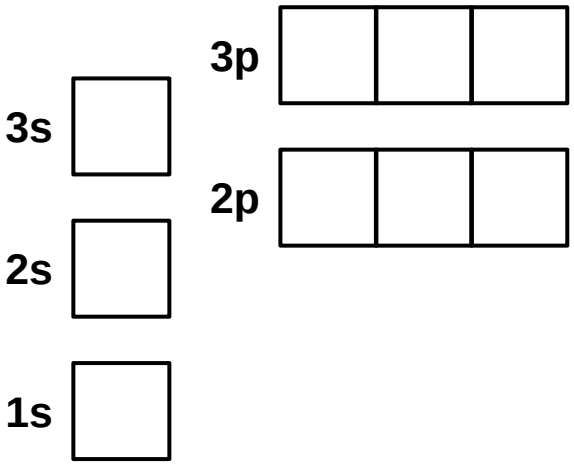


8) Magnesium



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