

Balancing & Classifying Equations:

Name: _____

Directions: For each of the following equations, Use the Fruit Loops to construct models of the equations and build them on the paper. Once you have build and balanced them correctly, write the equation with correct coefficients on your worksheet and draw pictures that represent the reactions.

A – Yellow B – Orange C – Green D – Blue E – Red F – Purple

1. An atom of element A reacts with the diatomic molecule B₂ to yield the molecule AB.

Picture/Illustration:

Written and Balanced Equation with Coefficients:

Signature : _____

2. An atom of C combines with the diatomic E₂ molecule to yield C₃E₈.

Picture/Illustration:

Written and Balanced Equation with Coefficients:

Signature : _____

3. A molecule of DF₃ combines with an atom of C to yield a molecule of DC and an atom of F.

Picture/Illustration:

Written and Balanced Equation with Coefficients:

Signature : _____

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4. The molecule BD_2 breaks down and yields the diatomic molecule B_2 and diatomic molecule D_2 .

Picture/Illustration:

Written and Balanced Equation with Coefficients:

Signature : _____

5. A molecule of AE reacts with FC_2 yielding two products, FE_2 and a molecule of AC .

Picture/Illustration:

Written and Balanced Equation with Coefficients:

Signature : _____

6. A_2E yields an atom of A and the diatomic E_2 molecule.

Picture/Illustration:

Written and Balanced Equation with Coefficients:

Signature : _____

7. An atom of A reacts with a BF molecule to produce a diatomic B_2 molecule and an AF_3 molecule.

Picture/Illustration:

Written and Balanced Equation with Coefficients:

Signature : _____