**Science 9**

**Unit B: Matter and Chemical Change**

**Lesson 7**

**Practice Worksheet 21: Working With Chemical Formulas**

Seven chemical formulas are listed in the table below. Complete the table with the following:

* List the elements present in the formula. Write both their symbols and names.
	+ Need a hint? Each time you see a new capital letter, a new element starts. Every lowercase letter is part of the symbol for the capital letter to the left of it.
* State the number of atoms of each element in the formula.
* Identify the state of the substance.

*Leave your answers in blue; it will be easier for you and your teacher to see them later.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chemical Formula** | **Element Symbols** | **Element Names** | **How many atoms of each element?** | **State of substance** |
| 1. CO2(g)[Click here for an explanation.](https://adlc.wistia.com/medias/68c2vx1h0f) | *C**O* | *carbon**oxygen* | *1**2* | *gas* |
| 2. Br2(l) | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* |
| 3. CaO(s) | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* |
| 4. KF(s) | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* |
| 5. F2(g)[Click here for an explanation.](https://adlc.wistia.com/medias/fujvw9uarf) | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* |
| 6. H2O(l)[Click here for an explanation.](https://adlc.wistia.com/medias/p12n7v1v65) | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* |
| 7. MgCl2(s)[Click here for an explanation.](https://adlc.wistia.com/medias/3xlp8rug74) | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chemical Formula** | **Element Symbols** | **Element Names** | **How many atoms of each element?** | **State of substance** |
| 1. BeCl2(s) | *Be**Cl* | *beryllium**chlorine* | *1**2* | *solid* |
| 2. CH4(g) | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* |
| 3. NaOH(s) | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* |
| 4. Li3N(s)[Click here for an explanation.](https://adlc.wistia.com/medias/4vlzqhsyno) | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* |
| 5. CaCO3(s)[Click here for an explanation.](https://adlc.wistia.com/medias/5h4oenou7p) | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* |
| 6. Na3PO4(s)[Click here for an explanation.](https://adlc.wistia.com/medias/06349vcola) | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* |
| 7. H2SO4(l)[Click here for an explanation.](https://adlc.wistia.com/medias/2pwnr1hpm1) | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* |
| 8. NaHCO3(s) | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* | *Type your answer here.* |

**Congratulations! You have completed this practice worksheet.**

Now it's time to carefully compare your answers to the suggested answers in the online course. When comparing, you should feel free to make changes to your answers or make extra notes.

**Keep this practice worksheet for study purposes.** Using practice worksheets as a study tool to review for exams is a great idea.

**If you unsure about any of the questions or answers, or you just want more feedback, share this practice worksheet with your teacher and ask for assistance.** You can do that by emailing the teacher, or by submitting it in the Course Questions Forum in the online course. If you are using this practice worksheet in Google Drive, don’t forget to change the sharing settings so that anyone can view it before sending the link to your teacher.