**ANSWERS: Bond dipoles and polarity of molecules**

|  |  |
| --- | --- |
|  | **Bond dipoles present within the molecule?** |
| **HCl**  | **yes** |
| **N2** | **no** |
| **Cl2**  | **no** |
| **F2**  | **no** |

**2023**



|  |  |  |
| --- | --- | --- |
| **Year** | **Molecule** | **Polar molecule?** |
| **2023** | water | **yes** |
| **2022** |  | **no** |
| **2022** |  | **yes** |
| **2021** |  | **yes** |
| **2021** |  | **no** |
| **2019** |  | **yes** |
| **2017****2010** |  | **yes** |
| **2017****2010** |  | **no** |
| **2019****2016****2013****2010****2008** | **ammonia** | **yes** |
| **2016** | **borane** | **no** |
| **2015** |  | **no** |
| **2015** |  | **no** |
| **2014** |  | **yes** |
| **2023****2014****2011** |  | **no** |
| **2012** |  | **no** |
| **2012** |  | **yes** |
| **2011** |  | **yes** |
| **2009** |  | **no** |
| **2009** |  | **yes** |

© <https://www.chemical-minds.com>

NCEA questions and answers reproduced with permission from NZQA­