

***The ‘DNA’ of Our School***

***Lesson Plan for Key-stage 2 Upper Maths***

*This plan and those for further year groups downloadable at www.toleranceday.org*

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| **Themes**: Tolerance, Data Collection, Data Presentation |
| **Year Group** | Key-stage 2 Upper (Years 5 & 6)Maths/ICT; Statistics (2 x 30 mins) |
| **Skills Developed** | Listening and communicationBuilding empathy |
| **Learning Objectives** | * Pupils draw graphs relating two variables, arising from their own enquiry and in other subjects
* Interpret and construct pie charts and line graphs
* Understand the levels of diversity in their school and communicate it to the rest of the school
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| **Teacher Input** |  | **To Include** | **Timing** |
|  | Opener Activity – class discussion | It’s important the school and the government to know certain information about the diversity of pupils in a school. What do you think they might need to know and why?Create a listEg. Gender, religion, language spoken at home, nationality, subjects studied, enjoyment of school, sick days, dyslexia, enjoyment of school lunches  | 8 mins |
| **Class Activities** |  |  |  |
|  | Ranking the information | 1. Let’s rank them by how important they are. Each of you have 5 votes and we will pick 5 to work with
2. Each vote for your top 5

Now we have 5 questions to work with | 5 mins |
|  | Collecting the data | If we want to find this information for the whole school, how shall we do it?Consider:* Is your question qualitative or quantiative?
* The wording of your question is important – test it out on someone before committing to it
* What are the range of possible answers (there could be lots!)
* Is the data discrete or continuous
* Do you think it would be useful to relate it to another variable eg. age, year group, if so this needs to be recorded at the same time
 | 12 mins |
|  | Create charts of the results | Chose the best way to display with results and create a series of charts. Think about whether you need 2 axis or whether it would be best as a pi | 30 mins |
| **Plenary** | Summing up  | Share results charts with the class; what did we learn from doing this? Were you surprised by any of the results? Come up with a plan to share with the Head and/or whole school |  |
| **Homework/****follow-on work** |  | Configure the percentages. Add up how many of each group you have. Divide each number by the total number of pupils and multiply the number by 100. This will give you the percentage of each group. Compare these numbers with the national average |  |