## Often Absent

## You need：a computer

Mrs McKenzie is the principal of her school．She is concerned about the number of students absent during winter．She checks the register of one of her year 8 classes for a 4 week period． This is what she finds．（Each＂a＂represents a half－day absence．）

| Name | Week 3 |  |  |  |  |  | Week 4 |  |  |  |  |  | Week 5 |  |  |  | Week 6 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Algar，Vince | $\times$ | $\times$ | －$\times$ | $\times 1$ | $\times^{\circ}$ |  |  | $\times \times$ | $\times 1 \times$ | $\times \times$ | $\times{ }^{a}$ | ， | $\times>$ | $\times 1 \times$ | ｜$\times 1 \times$ | $\times^{a_{a}}$ | x | $\times$ | $\times$ | $\times 1$ |  |  |
| Baker，Kellie | a |  | ${ }^{\circ} \times$ | $\times>$ | $\times \times$ |  |  | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times$ | $\times^{a}$ | ${ }^{a_{a}} \times$ | $\times \times$ | $\times \times$ | $\times$ | $\times$ | $\times{ }^{\text {a }}$ | ${ }_{\text {a }} \times$ | $\times$ |  |
| Cook，Candice | － | X | $\times$ | $\times$ | $\times$ | $\times$ |  | $a_{a}{ }^{\text {a }}$ | $a_{a}{ }^{\text {a }}$ | $a_{a}{ }^{\text {a }}$ | $a_{a}{ }^{\text {a }}$ | $a_{a}$ | $\times \times$ | $\times 1 \times$ | $\times \times$ | $\times \times$ | $\times$ | $\times$ | $\times \times$ | $\times$ | $\times$ |  |
| Dimes，Alisha | ／a |  | X $\times$ | $\times \times$ | $\times$ | $\times$ |  | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times$ | $\times>$ | $\times>$ | $\times \times$ | $\times \times$ | $\times$ | $\times$ | $\times$ | $\times$ |  |  |
| Eyles，Francesca | $\times$ | － | $\times^{\text {a }}$ | ${ }^{\text {a }}$ ， | $\times \times$ | $\times$ |  | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times$ | $\times \times$ | $\times^{\text {a }}$ | ${ }^{a_{a}} \times$ | $\times \times$ | $\times$ | ${ }^{\text {a }}$ | ${ }_{a} \times$ | $\times \times$ | X |  |
| Falua，Georgia | $\times$ | X | $\times$ | $\times 1$ | $\times \times$ | $\times$ |  | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times$ | $\times>$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times$ | $\times$ | $\times$ | $\times$ |  |  |
| Gard，Josh | a | a | $a^{\text {a }}$ a | $a_{a} \backslash$ | $\times \times$ | $\times$ |  | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times$ | $\times$ | $\times \times$ | $\times \times$ | $\times$ |  |
| Harris，Alyssa | $\times$ | － | $\times 1$ | $\times 1 \times$ | $\times 1 \times$ | $\times$ |  | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times{ }^{9}$ | $a_{a} \times$ | $\times 1 \times$ | $\times \times$ | $\times^{a_{a}}$ | $\times$ | $\times$ | $\times \times$ | $\times 1$ | 入 |  |
| Iva，Sean | X | $\times$ | $\times$ | $\times 1$ | $\times^{\circ}$ | ${ }^{\text {a }}$ | $\times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times 1$ | $\times \times$ | $\times>$ | $\times$ | $\times$ | $\times$ | $\times$ |  |  |
| Knapp，Heidi | $\times$ | X | $\times$ | $\times 1$ | $\times 1$ |  |  | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times$ | $a_{a}>$ | $\times$ | $1 a^{a}{ }_{0}$ | ${ }^{\text {a }}$ ，${ }^{\text {a }}$ | a | ${ }_{\text {a }} \times$ | $\times \times$ | X | $\times$ |  |
| Lamb，Nathan | $\times$ | $\times$ | ${ }^{\text {a }}$ | $a_{a}$ \} | $\times \times$ | $\times$ |  | $\times \times$ | $\times \times$ | $\times{ }^{\text {a }}$ | $a_{a}{ }^{\text {a }}$ | $a_{a}$ | $\times>$ | $\times 1 \times$ | $\times 1 \times$ | $\times \times$ | － | $\times \times$ | $\times \times$ | $\times$ |  |  |
| Manu，Paul | $\times$ | X |  |  | $\times^{\circ}$ |  |  | ${ }^{\text {a }}{ }^{\text {a }}{ }_{\text {a }}$ | ${ }_{a} \times$ | $\times$ | $\times \times$ | $\times^{\circ}$ | $a_{a}{ }^{\text {a }}$ | ${ }^{\text {a }}$ | $\times 1 \times$ | $\times$ |  | ${ }_{a} \times$ | $\times \times$ | $\times$ |  |  |
| Norris，Thomas | $\times$ | $\times$ | $\times \times$ |  | $\times 1$ |  |  | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times$ | $\times>$ | $\times$ | $\mathrm{a}_{a} \times$ | $\times \times$ | $\times$ | －$\times$ | $\times \times$ | $\times$ |  |  |
| Oates，Cameron | $\times$ | X |  |  | ／a |  |  | $\times \times$ | $\times \times$ | $\times \times$ | $\times 16$ | ／a | $\times>$ | $\times$ | $\times \times$ | $\times 1 /$ | $\times$ | $\times$ | $\times \times$ | $\times$ |  |  |
| Parke，Mikey | $\times$ | $\times$ | $\times \times$ |  | $\times \times$ |  | $\times$ | $\times \times$ | $\times \times$ | $\times^{a}{ }_{0}$ | ${ }^{\text {a }}{ }^{\text {a }}{ }_{0}$ | ${ }^{\text {a }}{ }^{\text {a }}$ | $a_{a} a_{0}$ | ${ }^{\text {a }}$ | $\times \times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ |  |  |
| Reyes，Nick | X | $\times$ | －$\times$ | X ${ }^{\text {a }}$ | $a_{a}{ }^{\text {a }}$ |  | X | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times$ | $\times>$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times$ | ${ }^{\text {a }}$ | ${ }_{a} \times$ | $\times>$ | $\times$ |  |
| Scott，Aidan | a |  |  |  | a |  |  | $\mathrm{a}_{\mathrm{a}}{ }^{\text {a }}$ | ${ }^{\text {a }}$ ，$\times$ | $\times \times$ | $\times \times$ | $\times$ | $\times \times$ | $\times 1 \times$ | $\times \times$ | $\times \times$ | $\times$ | X $\times$ | $\times$ | $\times \times$ |  |  |
| Taylor，Damian | $\times$ |  |  |  | $\times \times$ |  |  | $\times \times$ | $\times$ | $\times \times$ | $\times \times$ | $\times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ |  | ${ }_{a} \times$ | $\times$ | $\times^{\text {a }}$ |  |  |
| Toye，Jeremy | $\times$ | a | ${ }_{a} \times$ |  | $\times \times$ |  |  | $\times{ }^{\text {a }}$ | $a_{a}{ }^{\text {a }}$ | $a_{a} \times$ | $\times \times$ | 入 | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ |  | $\times$ | $\times \times$ | $\times \times$ |  |  |
| Urry，Samantha | $\times$ | $\times$ | $\times$ |  | $\times \times$ |  |  | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times$ | ／a／a | ／a／ | ／a $\times$ | $\times \times$ |  | $\times$ | ${ }^{\text {a }}{ }_{\text {a }}$ | ${ }^{\text {a }}$ 入 | 入 |  |
| Valli，Bernice | $\times$ | $\times$ |  | $\times^{\text {a }}$ | ${ }^{\text {a }}$ ，$X$ | $\times$ |  | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | X | $\times>$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times$ | X $\times$ | $\times$ | $\times>$ | $\times$ |  |
| Ward，Melina | $\times$ | $\times$ | $\times$ | $\times>$ | $\times>$ | $\times$ |  | $\times \times$ | $\times \times$ | $\times \times$ | $\times \times$ | $\times$ | $\times>$ | $\times \times$ | $\times \times$ | $\times \times$ | X | $\times$ | $\times \times$ | $\times$ | 入 |  |
| White，Angela |  |  |  |  |  |  |  | $\times$ | ， | ， | $\times$ |  | $\times \times$ | $\times$ | $\times \times$ | 入 |  | $a_{a}$ | ${ }_{a}{ }^{\text {a }}$ | ${ }^{\circ}{ }^{\text {a }}$ |  |  |

1．How many days was Heidi Knapp absent？

2．a．Count the total absences for each student over the 4 week period．
b．Enter this information into a spreadsheet and use it to create a bar graph with the bars arranged in order of total days absent．

3．a．Count the total number of absences each day（for example， 3.5 on the Monday of week 3）．
b．Enter this information into a spreadsheet and use it to create a time－series graph showing daily absences over the 4 weeks．

4．Study your two graphs carefully．Do you think Mrs McKenzie needs to be concerned about the absenteeism in her school？ Explain．

