

Autosomes	Sex Chromosomes																		
<p>Autosomes are: All chromosomes other than sex chromosomes; Do not directly determine an organism's sex</p> <p>Autosomal gene expression: Two alleles that interact to produce a phenotypic trait;</p> <p>Inheritance of autosomes: Punnett Square should demonstrate that inheritance occurs according to Mendel's rules, one allele from each parent</p> <table border="1"> <tr> <td></td> <td>Q</td> <td>Q</td> </tr> <tr> <td>q</td> <td>Qq</td> <td>Qq</td> </tr> <tr> <td>q</td> <td>Qq</td> <td>Qq</td> </tr> </table>		Q	Q	q	Qq	Qq	q	Qq	Qq	<p>Sex chromosomes are: Chromosomes that determine an organism's sex</p> <p>Inheritance of sex chromosomes: Punnett Square should indicate that females (XX) can only pass on an X chromosome and males (XY) can only pass on either one X or one Y chromosome</p> <table border="1"> <tr> <td></td> <td>X</td> <td>X</td> </tr> <tr> <td>X</td> <td>XX</td> <td>XX</td> </tr> <tr> <td>Y</td> <td>XY</td> <td>XY</td> </tr> </table> <p>Expression of sex-linked genes in males: All sex-linked genes are expressed because is no second allele that could mask the first allele;</p> <p>Expression of sex-linked genes in females: Similar to autosomal, but one X chromosome in each cell is randomly "turned off" through X chromosome inactivation</p>		X	X	X	XX	XX	Y	XY	XY
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