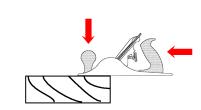
## Design & Manufacture

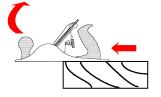
## Homework 15

If the grain is parallel to the edge then it is possible to plane in either direction and gain a smooth finish.



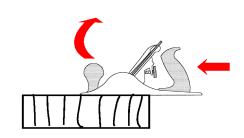
At the start of the stroke the front should be held down firmly on the end of the piece of wood with the blade clear of the wood. The other hand should be used to push the plane along the surface. When the blade has passed over the other end of the piece of wood the plane should be lifted clear and returned to its starting position. If the plane is not lifted clear the results of the planning cannot be seen for checking.





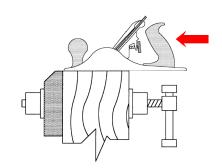
## Planing end-grain

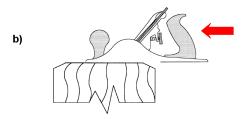
If the plane is taken over the end of an end-grain surface the wood will split. To stop this, always lift the plane early just beyond the centre and then plane in the other direction and lift early.





Another method, suitable for narrow pieces, is to clamp a piece of waste wood with an angled (chamfered) corner to the side and plane the full width. The waste wood will hold the grain of the work together and stop it splitting. The chamfered corner of the waste wood is resistant to splitting (a). A third method is to chamfer one or both corners of the wood to be planed (b).





## Questions

1.	How can you tell which direction to plane a piece of wood to get a smooth finish?
•••••	
2.	If the grain is mainly parallel to the edges, in which direction can you plane it?
•••••	
3.	What happens if you try to plane end-grain in the same way as side-grain?
4.	What is the recommended method of planing the end-grain of a narrow piece of wood?