ES					
	TECHNOLOGY	Knowledge & understanding	Needs	Resources	Processes
	TECHNOLOGY	Skills in designing & making	Preparing	Carrying out	Reviewing
	SCIENCE	K & U - Energy and forces	Properties of energy	Conversion of energy	Forces *levers, gravity, friction*
	SCIENCE	K & U - Earth & space	Materials from Earth	Changing materials	
	SS&T	K & U - People in the past	Change and continuity		

A crane that picks up its load and then puts it down in exactly the same place is perhaps of limited use - although, if you think about it, it could lift from one vehicle and put it down on another if the vehicles change places.
It would, however, be useful if we had a model crane that could move. We could mount it on a wheeled chassis or we could mount it on a swivelling platform. Or we could mount it on a swivelling platform that is itself mounted on a chassis!

STAGE ONE
So, what is it going to be?
A mobile crane that can swing round while the vehicle remains stationary? Are you going to use a crane you have already made?, or will you need to make another?
Have you already made a vehicle - do you remember how it was made?
Even if you have already made both, or the experience and knowledge to make both, you will need the mount that joins then together. It's no use just gluing the crane to the lorry if you want the crane to rotate.

It just so happens that this manual contains worksheets for models that rotate. There is another kind of crane called a 'derrick', and this is shown mounted on a base in such a way that it can rotate. There is also a worksheet for a roundabout or 'carousel'. Either of these may give you useful clues as to how you might proceed.
There are also notes on chassis design, axles and wheels.

STAGE TWO
Design and make your mobile crane. You will have to work out which part to build first - if you feel that it matters. If you are starting with a ready-made crane, then you can work out the size of the vehicle that you will need for it to fit.
Will the crane's feet get in the way?

STAGE THREE
Well. . does it work? What weight will it lift before it falls over? Find out, and make a sign showing 'Safe working load'
Does this vary with the position of the crane? Does it tip over more easily when the crane is across the chassis or when it's in line?