

A-Level Physical Education (OCR)

H555/01: Physiological factors affecting performance - Synoptic Task.

Real-life scenario:

You are a Strength & Conditioning coach for a baseball team. A player has injured their shoulder when pitching. You need to now assess, diagnose and come up with a short-term and long-term treatment plan for rehabilitation back to full fitness.

Task:

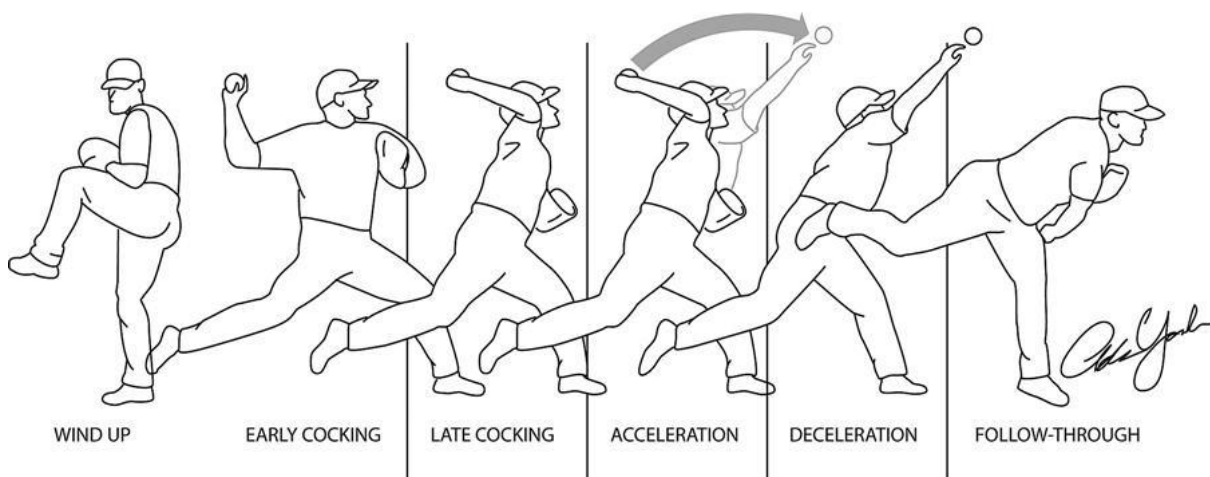
Complete the table below to show how a S&C coach would logically deal with this scenario and how they would apply their knowledge of Anatomy & Physiology.

You will need to research and read around the topic areas in order to provide the right level of answers. Your resources can be the recommended text book, any of the recommended websites/pages (Brianmac.com) that have been provided or any other resources that you see to be suitable.



Strength & Conditioning Injury Analysis	
Sport	
Skill being used	
Joint (page 3-4)	
Type of joint	
Bones articulating at the joint (page 3)	
Muscles surrounding the joint (pages 17-18)	

Movement being performed (from early cocking to follow-through) (pages 17-18)	You will need to select the two correct movement terms from the following list: Lateral Rotation, Medial Rotation, Horizontal Flexion, Horizontal Extension.
Muscle performing the movement (Book page 17-18)	Movement 1 – Muscle creating it - Movement 2 – Muscle creating it -
What muscles stabilise the joint?	



The player is complaining of 'deep' shoulder pain and painful movement. What do you think the injury might be?
What would the immediate treatment be?
Once the injured area has had time to rest and the inflammation has gone, you will need to start a rehabilitation programme. Devise a group of exercises that the athlete should start with for the first 3 weeks. (Ideas – Resistance band, free weights, machine weights, cable weights, body weight) *See pages 100-101 for ideas on sets, reps, recovery etc.

Now devise a 3 -week training programme that would **build on the first 3 weeks.**

Now devise a warm-up routine that would help to reduce the likelihood of the pitcher suffering from a shoulder injury again.

Finally, you are to do a pencil drawing of the shoulder joint, including labels. You need to include the following structures: Anterior, posterior and medial deltoids, pectoralis major, latismus dorsi, trapezius. You do not have to include the rotator cuff muscles.

- Insert a picture of your drawing below 😊