



Pathfinder Honour: Workbook

Bones, Muscles & Movement



Name:

Club:

Date Started:

Date Completed:

Instructor Name:

Signature:

Club Director's Name:

Signature:

Please Award Patch:

Date:

To be signed by Authorised Person (ie District Director for Pathfinders) after satisfactory completion. Leaders, please see the Assessment Sheet for a checklist of practical requirements and a short test to check knowledge of honour.

Date Patch Presented

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Instructions:

Please write brief notes. Use drawings / pictures to assist with your explanation.

Hint: Why not use your own body as reference!!

Requirement 1: What's the difference between exoskeletons and endoskeletons? Which type of skeleton do humans have?

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Requirement 2: List three functions of the skeletal system.

- 1.
- 2.
- 3.

Requirement 3: Is bone a living tissue? Explain why or why not.

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Requirement 4: Describe the structure and development of bone.

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Requirement 5: Identify the following bones of the skeletal system.

Please place the letter beside the bone/s. We started with the Cranium

	Carpals	
	Clavicle (collar bone)	
A	Cranium	
	Femur	
	Fibula	
	Humerus	
	Mandible	
	Maxillary bones	
	Metacarpals	
	Metatarsals	
	Patella	
	Pelvis	
	Phalanges	
	Radius	
	Ribs	
	Scapula (shoulder blade)	
	Coccyx (tail bone)	
	Sternum (breast bone)	
	Tarsals	
	Tibia	
	Ulna	
	Vertebrae	

Figure based on: http://upload.wikimedia.org/wikibooks/en/b/bc/Labelled_skeleton.png

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Requirement 6: What is a joint?

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Requirement 7: List the three types of joints found between bones.

1.	
2.	
3.	

Requirement 8: Name and describe six types of freely movable joints. Be able to locate an example of each of these in your body.

	<u>Name</u>	<u>Brief Description and Where Located</u>
1.		
2.		
3.		
4.		
5.		
6.		

Requirement 9: Be creative and construct a model of one of the six freely movable joints.
Briefly describe what you did.

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Requirement 10: What is another name for a broken bone? List 3 types of breaks that can occur in bones. Describe how bones heal and how doctors can help this process.

Another name for a broken bone:		
Types of breaks that can occur in bones:	1.	
	2.	
	3.	
How bones heal:		
How doctors can help bones heal:		

Requirement 11: What is osteoporosis? Who can get it? List at least 5 health habits that deal with maintaining healthy bones and muscles.

What is osteoporosis?		
Who can get osteoporosis?		
Health habits that deal with maintaining healthy bones and muscles:	1.	
	2.	
	3.	
	4.	
	5.	

Requirement 12: What is the function of the muscular system?

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Requirement 13: Name and describe 3 types of muscle tissue. Give one example of each.

	<u>Types of muscle tissue</u>	<u>Example of muscle tissue</u>
1.		
2.		
3.		

Requirement 14: Be able to identify the following muscles on your body
Please place the letter beside the muscle/s. We've started with the Masseter

	Abdominal	
	Biceps	
	Deltoid	
	Gastrocnemius / Soleus	
	Gluteus maximus	
	Hamstrings	
	Latissimus dorsi	
A	Masseter	
	Pectoralis	
	Quadriceps	
	Trapezius	
	Triceps	

Figure based on: http://upload.wikimedia.org/wikibooks/en/8/85/Muscles_labeled.jpg

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Requirement 15: Describe the process that causes a muscle to contract.

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Requirement 16: Describe the difference between voluntary and involuntary muscles.

Voluntary muscles:

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Involuntary muscles:

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Requirement 17: Using your model in # 9, show how muscles, bones, and joints work together to produce movement.

Please give a brief description.

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Requirement: 18: Find 3 texts in the Bible that mention bones and/or muscles. Tell about each one in your own words.

	<u>Where found</u>	<u>Brief Description</u>
1.		
2.		
3.		

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