

Stretching the More Able








Here are two hourglasses. They contain sand. When the area full of sand is turned to the top it will start to filter down to the lower section. It's a device that goes back through the centuries but is remarkably accurate for time keeping.


One timer takes exactly NINE minutes for the sand to move from the top to the lower section. The other timer takes exactly FIVE minutes for the same thing to happen.




 How can I measure 5 minutes exactly?

 How can I measure 9 minutes exactly?

 How can I measure 4 minutes exactly?

 How can I measure 14 minutes exactly?

 How can I measure 10 minutes exactly?



Your task is to find a way to measure 13 minutes using the two timers.

Characteristics

Bright Student

Knows the answer
Is interested
Has good ideas
Works hard
Answers questions
Top set
Listens with interest
Learns easily
6-8 repetitions to master
Enjoys friendships with peers
Understands ideas
Good memoriser
Is receptive
Prefers the uncomplicated
Copies accurately
Is attentive
Enjoys school
Enjoys praise for achievements
Completes the set task

More Able Student

Asks searching questions
Is extremely inquisitive
Ideas are unusual, wacky
Can be disruptive but score well
Is reflective, includes detail
Works beyond the group
Has strong feelings and opinions
Knows already
1-2 repetitions to master
Prefers company of older students & adults
Constructs abstractions
Guesses correctly
Can be intense
Thrives on complexity
Applies and manipulates facts
Can be untidy
Relishes learning
Is highly self-critical
Avoids approval, seeks improvements

Ways to Differentiate

Content: The students study different materials within the same topic area but do the same activities.

Task: The students study the same content but do different activities.

Negotiation: The students study different materials within the same topic area and also do different activities. Teachers help students to select appropriate materials.

Support: The students study the same materials, do the same activities, but receive different amounts of support from the teacher or from printed information.

Extension: The students study the same materials and do the same activities. Extension work is given to the most able after they have finished the basic activities.

Outcome: The students are set open ended assignments that can be interpreted at different levels.

Group work: The students work in mixed ability groups. Students help each other by working together and interpreting the tasks at different levels.

Gradation: The students are given the same information and activities. The activities become progressively more difficult. The students work through the activities at different rates and therefore only the more able do the more difficult tasks.

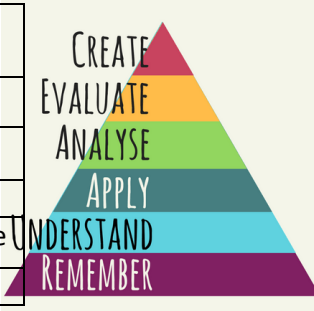
Role: The students carry out different activities depending on the role they are playing in a simulation. The roles are matched to the abilities, aptitudes and needs of the students.

Differentiation by task

Explanation:
Higher Order:
Through questioning

Task

Write a question for each level to challenge your peers higher order thinking

Conclude, contrast, criticise, critique, evaluate, justify	
Design, organise, plan, reconstruct, revise	
Analyse, break down, compare	
Demonstrate, modify, predict, relate, show	
Defend, distinguish, estimate, explain, summarise	
Define, describe, identify, list, outline	

Use this space here to design a task for your subject:

Remember
Understand
Apply
Analyse
Evaluate
Create

Fast Finisher Task

Create an exam question and mark scheme using the command word 'explain', then give it to another fast finisher.

Fast Finisher Task

Create an exam question and mark scheme using the command word 'discuss', then give it to another fast finisher.

Fast Finisher Task

Select an area of today's topic that you would like to research further. Summarise your findings.

Fast Finisher Task

Create an exam question and mark scheme using the command word 'compare', then give it to another fast finisher.

Fast Finisher Task

Fast Finisher Task

Use the blank card above to start designing your Fast Finisher cards

FAST FINISHER TASK
SIMPLE KEY TERMINOLOGY












-ml -h-d -ta -r-br
 h-l h-l h-l h-l

FAST FINISHER TASK
SIMPLE KEY TERMINOLOGY

-ml -h-d -ta -r-br
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 **SIMPLE KEY TERM IS:
SLOW OXIDATIVE MUSCLE FIBRES** 

FAST FINISHER TASK
TRUE OR FALSE STATEMENT











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FAST FINISHER TASK
TRUE OR FALSE STATEMENT











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 **TRUE OR FALSE?
FAST TWITCH MUSCLE FIBRES HAVE
LOTS OF MITOCHONDRIA?** 

FAST FINISHER TASK
EXTENDED ANSWER












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FAST FINISHER TASK
EXTENDED ANSWER








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 **ANSWER THE QUESTION:
WHY ARE SLOW TWITCH MUSCLE
FIBRES RICH IN CAPILLARIES?** 

Use www.rebuses.org to create your own specific cards.

Here is another for you to try...



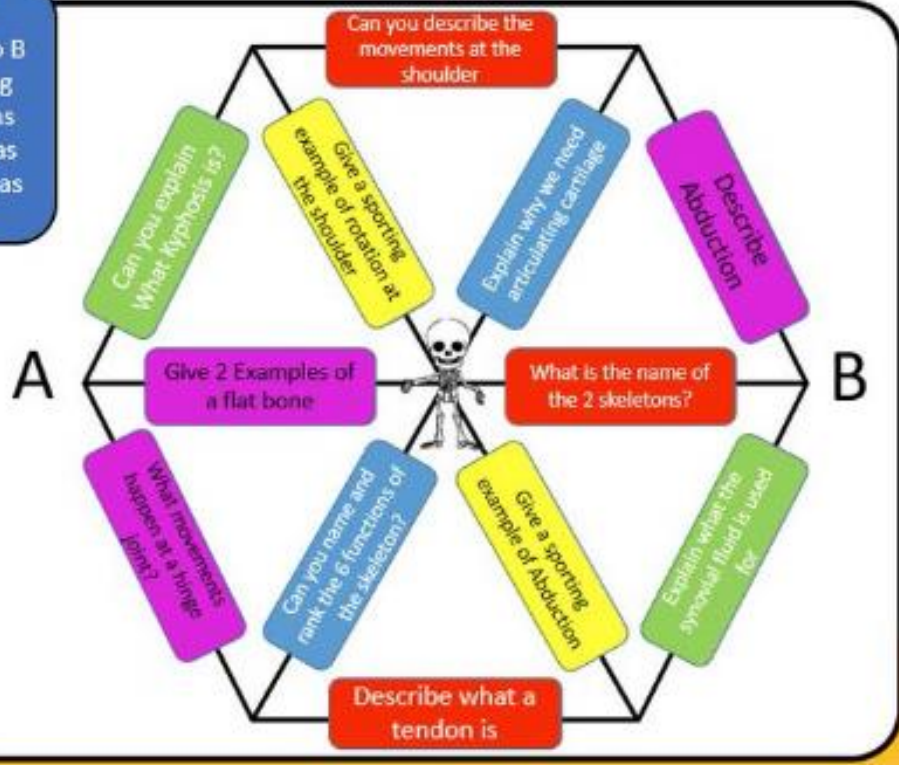



+s +r a=t c=t -f h=m -s -t

Knowledge Wheel

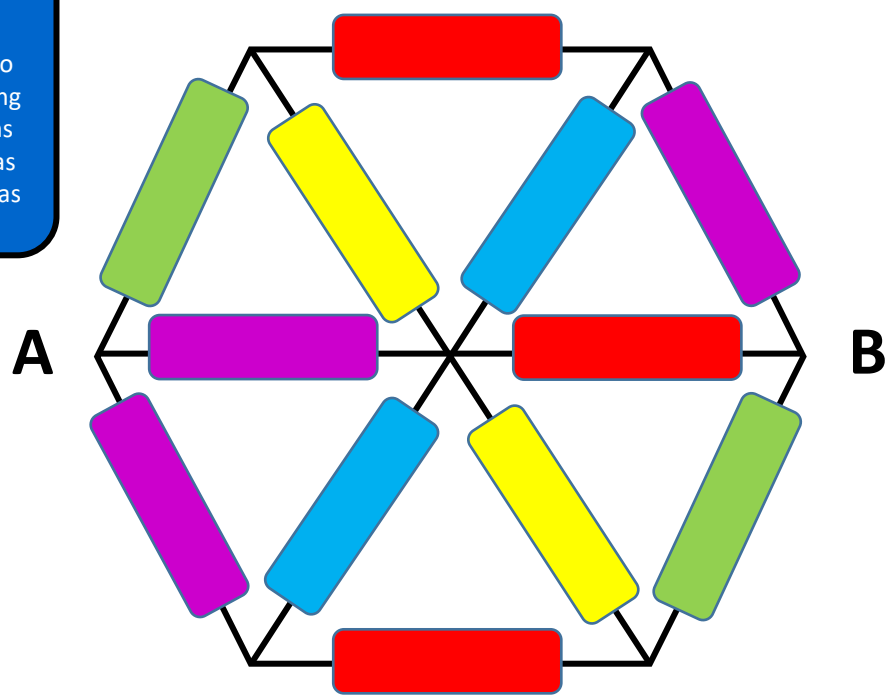
TASK 1
Get from A to B by answering the questions and getting as many points as Possible

- Points
- 5
 - 4
 - 3
 - 2
 - 1



TASK 1
Get from A to B by answering the questions and getting as many points as possible

- Points
- 5
 - 4
 - 3
 - 2
 - 1



The DOs and DONT's of Stretch and Challenge

Do...

- Understand that more able students, just like all students come to school to learn and be challenged.
- Pre-assess your students. Find out their areas of strength as well as those areas you may need to address before students move on.
- Consider grouping more able students together for at least part of the lesson.
- Plan for differentiation. Consider pre-assessments, extension activities and compacting the curriculum.
- Encourage high ability students to take on challenges. They're often used to getting good grades, more able students may be risk averse.

Don't...

- Confuse high achievers with high ability students. High achievers put in the time and effort to succeed in school. This may not be the case with high ability students. Their gifts may not translate into academic achievement and their behaviour can at times be non-compliant.
- Assume that all most able students are the same and that one strategy works for all.
- Assume that by making more able students tutors, you're providing a learning extension.
- Confuse extension activities with additional work. More able students need deeper and more complex work.
- Refer to alternate work for more able students as "free time". Call it "choice time". Students understand that they are required to tackle a task during this time.
- Give too many directions to students about how they should complete a task. Say, "Here's the end result I'm grading. How you get there is your choice."
- Assume that more able students are growing academically. Rely on formative and summative assessments.