

The logo for Next Step Test Prep is centered in the upper half of the image. It consists of a blue square containing the words "Next Step" in a large, white, sans-serif font, with "Next" on the top line and "Step" on the bottom line. Below "Step", the words "TEST PREP" are written in a smaller, white, all-caps, sans-serif font. The background of the slide is dark blue with a repeating pattern of small white plus signs. A white inverted triangle shape is positioned behind the logo, pointing downwards.

**Next  
Step**  
TEST PREP

**MCAT Memorization  
(drinking from the firehose)**

# Today's Info Session

- ▶ Welcome to this Info Session!
- ▶ Introduction
- ▶ Nature of Learning
- ▶ How to prep
  - ▶ Strategies for dealing with specific areas
  - ▶ How to tackle Psych
- ▶ How Can Next Step Help?
- ▶ Questions?

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**MCAT**  
Medical College  
Admission Test

**Biggest discount we have ever done!**

WHAT IS YOUR NEXT STEP?

# Introduction

**Hi, I'm Phil!**

- ▶ **MCAT Content writer**
  - ▶ **Tutored and taught for 9+ years**
  - ▶ **Attended University of Nebraska Medical Center as an MD/PhD student.**
- ✓ **Next Step is a team of test prep and educational experts committed to excellence.**



# Who Is Next Step?

Next  
Step  
TEST PREP

- Began in 2009 as a tutoring company
- Focus on graduate admissions tests only
- Team of educational experts
- First company to have materials built from ground up for 2015 MCAT format
- Now the first company to have new 2018 MCAT Interface

✓ We never stop improving our materials!



# Understanding the test

Exam Overview		
Section	# of Questions	Time Allotted
Examinee Agreement		8 minutes
Tutorial (optional)		10 minutes
Chemical and Physical Foundations of Biological Systems	59	95 minutes
Break (optional)		10 minutes
Critical Analysis and Reasoning Skills	53	90 minutes
Mid-Exam Break (optional)		30 minutes
Biological and Biochemical Foundations of Living Systems	59	95 minutes
Break (optional)		10 minutes
Psychological, Social, and Biological Foundations of Behavior	59	95 minutes
Void Question		5 minutes
Satisfaction Survey (optional)		5 minutes
Total Content Time		6 hours   15 minutes
<b>Total "Seated" Time*</b>		<b>Approx. 7 hours   33 minutes</b>

\*Total seated time does not include check-in time on arrival at the test center.

MCAT: a test like no other

# Subjects Tested

## Chemical and Physical Foundations

30% general chemistry

25% physics

25% biochemistry

15% organic chemistry

5% biology

## Bio and Biochemical Foundations

65% biology

25% biochemistry

5% organic chemistry

5% general chemistry

## Psychological and Sociological Foundations

65% psychology

30% sociology

5% biology

# Brief Neuroscience interlude

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## Stuff that your brain wants to learn:

- Navigation
- Facial recognition
- Gossip???

## Stuff that your brain DOESN'T want to learn:

- Lists of facts
- Piles of numbers and letters

# Memorizing MCAT Science: Techniques

## Mnemonics

- *Useful for?*

## Formula sheets

- *Useful for?*

## Study sheets

- *Useful for?*

## Flowcharts

- *Useful for?*

## Unit analysis

- *Useful for?*

## Flashcards

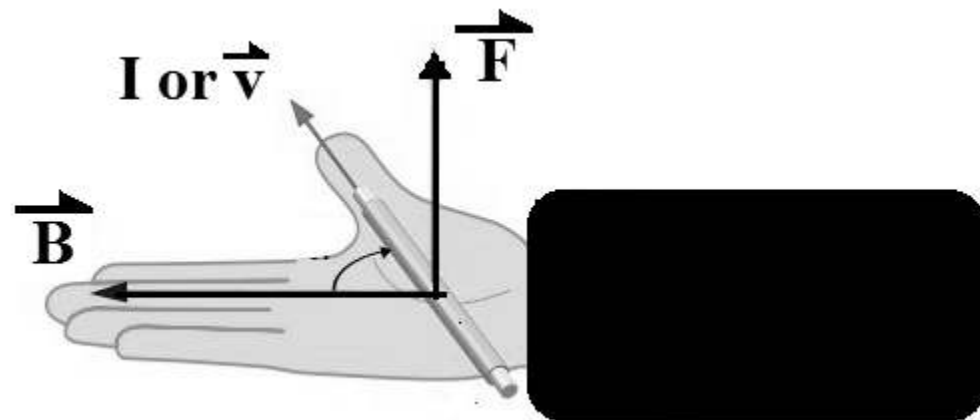
- *Useful for?*

## Spaced repetition

## Visual learning

- *Useful for?*

1 H 1.008																	2 He 4.00
3 Li 6.94	4 Be 9.01											5 B 10.81	6 C 12.01	7 N 14.01	8 O 16.00	9 F 19.00	10 Ne 20.18
11 Na 22.99	12 Mg 24.31											13 Al 26.98	14 Si 28.09	15 P 30.97	16 S 32.07	17 Cl 35.45	18 Ar 39.95
19 K 39.10	20 Ca 40.08	21 Sc 44.96	22 Ti 47.88	23 V 50.94	24 Cr 52.00	25 Mn 54.94	26 Fe 55.85	27 Co 58.93	28 Ni 58.69	29 Cu 63.55	30 Zn 65.39	31 Ga 69.72	32 Ge 72.61	33 As 74.92	34 Se 76.96	35 Br 79.90	36 Kr 83.80
37 Rb 85.47	38 Sr 87.62	39 Y 88.91	40 Zr 91.22	41 Nb 92.91	42 Mo 95.94	43 Tc (98)	44 Ru 101.1	45 Rh 102.9	46 Pd 106.4	47 Ag 107.9	48 Cd 112.4	49 In 114.8	50 Sn 118.71	51 Sb 121.75	52 Te 127.60	53 I 126.90	54 Xe 131.29





# Mnemonic Devices

## Mnemonics

- *Good ones are outrageous, naughty, or related to people you know (or all 3!)*
- *Can be **visual**, auditory, kinesthetic*
- *You should create a new mnemonic every other week*

## Examples:

### The classification hierarchy for living things:

*King Phillip Comes Over For Good Sushi*

*(Kingdom, Phylum, Class, Order, Family, Genus, Species)*

### The elements that are diatomic gases at standard conditions:

*Have No Fear Of Ice Cold Beer*

*(H<sub>2</sub> N<sub>2</sub> F<sub>2</sub> O<sub>2</sub> I<sub>2</sub> Cl<sub>2</sub> Br<sub>2</sub>)*

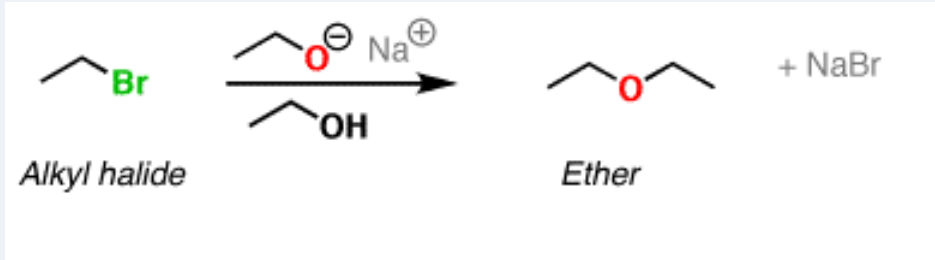
**Or memorize it phonetically**

*“huh-noff cull-bree”*: H<sub>2</sub> N<sub>2</sub> O<sub>2</sub> F<sub>2</sub> Cl<sub>2</sub> Br<sub>2</sub> I<sub>2</sub>

# Mnemonic Devices

When to Use:	Method:	Example:
<b>For information involving key words</b>	Acronym - an invented combination of letters with each letter acting as a cue to an idea you need to remember.	<b><i>AMPLE GiFTs – is an acronym for the anterior pituitary hormones (ACTH, MSH, prolactin, LH, beta-endorphin, GH, FSH, TSH).</i></b>
<b>For information involving key words</b>	Acrostic - an invented sentence where the first letter of each word is a cue to an idea you need to remember.	<b><i>Eat Tender Chicken Chunks Elegantly is an acrostic to remember Proteases in the Duodenum: Enterokinase, Trypsin, Chymotrypsin, Carboxypeptidase and Elastase.</i></b>  <b><i>FOL(d)M(a)PS - Ovarian Cycle: Follicular phase, Ovulatory phase, and Luteal phase. Menstrual Cycle: Menstrual flow, Proliferative phase, and Secretory phase.</i></b>  <b><i>SEVEN UP - Path of Sperm in the Male Reproductive Tract: Seminiferous tubules, Epididymis, Vas deferens, Ejaculatory Duct, N(Nothing), Urethra and Penis.</i></b>  <b><i>LAb RAt – to remember the bicuspid valve of the left atrium and the tricuspid valve of the right atrium.</i></b>  <b><i>SNoW DRoP – Lab techniques and the material they use. Southern blot, DNA; Northern blot, RNA, Western blot, protein</i></b>

# Mnemonic Devices

When to Use:	Method:	Example:
For remembering information items	Loci Method- Imagine placing the items you want to remember in specific locations in a room with which you are familiar.	<b>To remember the path of the blood: The door to your house is the SVC/IVC entry to the right atrium. As you walk through the house, each door will serve as a valve and the room will serve as the next chamber.</b>
For ordered or unordered lists	Chaining- Create a story where each word or idea you have to remember will cue the next idea you need to recall.	<b>Williamson-ether synthesis: Throw a magic wand and your favorite brand of beer into a wishing well, bring up the bucket to find angel wings</b>  <p><i>WELL is reminiscent of "WILLIAMSON", the magic wand is a long alkyl chain with Br-and reminding you it ends in a halide, the beer is the alcohol, and the pair of wings represents the ether product</i></p>

# Personality Disorders Worksheet Exercise

	Disorder Type	Behaviors
"ODD" Behavior <b>A</b>	Paranoid	Irrational suspicions and mistrust of others
	Schizoid	
	Schizotypal	Lack of interest in social relationships
Overly Dramatic <b>B</b>		Odd behaviour or thinking
	Antisocial	Pervasive disregard for the law and rights of others; may account for half of prison population in some countries
	Borderline	Instability in relationships, self-image, identity and behaviour
	Histrionic	Pervasive attention-seeking behaviour: shallow or exaggerated emotions
	Narcissistic	Pervasive pattern of grandiosity: need for admiration and lack of empathy
Anxiety Ridden <b>C</b>	Avoidant	Social inhibition; feelings of inadequacy
	Dependent	Pervasive psychological dependence on others
	Obsessive-compulsive	Rigid conformity to rules and moral codes; excessive orderliness

# Why is an MCAT study plan important?

- Studying and practicing for the MCAT tend to be doable...  
...but when you factor in planning as well, it can get stressful!
- This is especially true if you:
  - ▶ Work full-time
  - ▶ Are also taking college courses
  - ▶ Have a weak content background or specific MCAT needs

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**Q&A**

# Personalized Options

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- ✓ No matter your study style, subject expertise, or MCAT goal, Next Step has an option for your personal needs and lifestyle.
- **Self-Prep Materials and Planning**
- **Guided Online Study with Free Extra Help**
- **Flexibility and Personalization**
- **One-on-One Tutoring**



# Next Step: Educate Every Da

✓ Start your prep with high-value FREE practice to build a study plan suited to your goals, needs, and schedule.

## Industry's Best Free MCAT Practice Bundle

- Half-length MCAT diagnostic
- Full-length MCAT exam
- 500+ Question Science Content Diag exam
- Test Review Videos
- Multiple QBank Samples
- 16 Test & 4 Content Review Videos
- Proprietary Study Plan Generator
- Aligned to new MCAT 2018 Interface

Get your  
**FREE MCAT Practice  
Bundle**

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# New 2018 MCAT Interface

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- New highlighting features
- New strikethrough features
- New keyboard shortcuts
- New Navigation/Review Screens

Next Step is ready. Are you?

Medical College Admission Test - Clara Gillan Time Remaining: 01:21:34 18 of 59

Highlight Strikethrough

Remove Highlight

Pause

**Figure 1** Eosinophil activation as measured by percent of CD69-positive cells after 3 and 12 hours of co-culture (\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ )

Next, researchers aimed to assess the effect of NK co-culture on eosinophil degranulation. After 3 and 12 hours of co-culture, samples were centrifuged at 1500 rpm, and ECP levels were measured in the supernatants (Figure 2). No ECP was detected in supernatant culture of NK cells alone.

**Question 18**

Which of the statements below is supported by the experimental results, as shown in Figures 1 and 2?

- A. The duration of Eos co-culture with NK cells directly and linearly correlates to the amount of ECP found in the supernatant after centrifugation.
- B. Cells cultured with a 1:1 NK-to-Eos ratio displayed statistically similar levels of activation to cells cultured with a 5:1 NK-to-Eos ratio, as measured by CD69 expression.
- C. NK co-culture stimulates Eos activation while inhibiting degranulation.
- D. Co-culture with NK cells significantly increased Eos degranulation in all groups, as compared to Eos cells cultured alone.

Periodic Table Review Screen

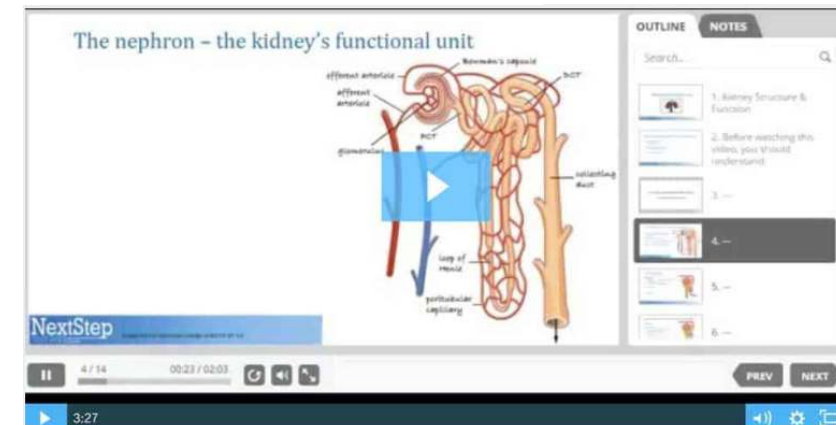
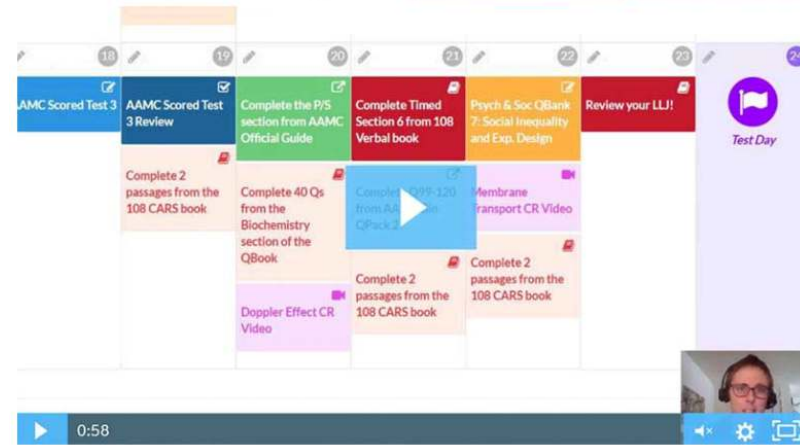
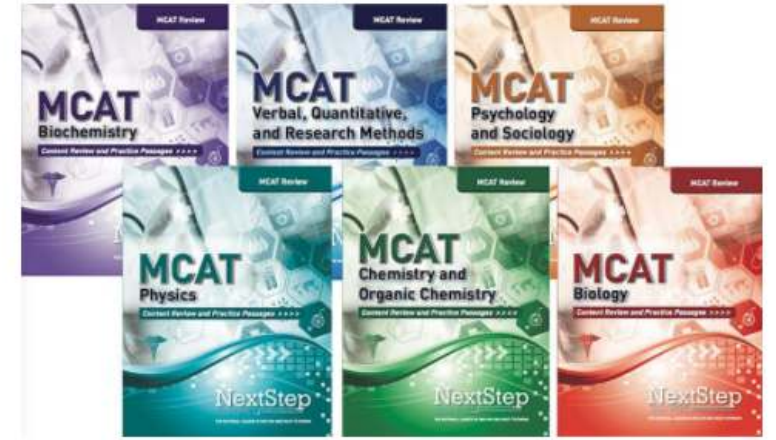
Previous Next

✓ Your practice experience matters! Prep with the most realistic testing environment with Next Step.

# Take the Best Next Step

✓ Others say it. We deliver it.

- Most up-to-date Lesson Review Books in 4-color
- QBank with passage and discrete question types
- Exclusive Study Plan Generator personalized for you
- Hundreds of hours of videos
- Private, small-group Office Hours 5 days a week
- Direct access to MCAT Content Team
- Affordable prep options: from books to tutoring



# MCAT Study Options

- **Best-in-Class MCAT Tutoring Packages**
  - Variety of packages: Crash Course to Elite
  - Choices include our MCAT Online Course
  - Personalized Study Plan for each student
  - Top-scoring tutors
- **Most up-to-date MCAT Course**
  - All new books in 4-color, all online AAMC resources
  - 10 full-length exams aligned to new interface
  - Live online office hours for any Q&A held 5 days per week
  - Study Plan Generator to match each student's strengths, weaknesses and schedule needs.
- **MCAT Practice Test Bundles**
  - Available in 4-, 6-, and 10-pack bundles

✓ **All aligned to new 2018 interface**

**Looking for free resources, or interested in signing up for future webinars?**

[nextsteptestprep.com/](https://nextsteptestprep.com/)

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**Step**

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