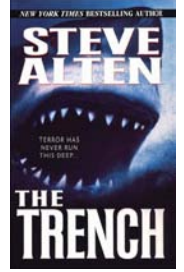


THE TRENCH

Curriculum & Project Ideas



Dear Teachers:

One of the goals of the ADOPT-AN-AUTHOR program is to assist teachers by providing a pool of easily accessible curriculum and project ideas. Materials will grow as more teachers e-mail me their ideas over the coming school year. I hope you participate.

The TRENCH is the sequel to **MEG: A Novel of Deep Terror** and the second in a series featuring *Carcharodon Megalodon*, the fearsome 60-foot, 40,000 pound prehistoric cousin of the great white shark. If your students have not read **MEG**, I suggest you begin with it before assigning **The TRENCH**, or the other books in the series – **PRIMAL WATERS** (book three) and **HELL'S AQUARIUM** (book four – with more to come). I am sure you will find all of the books to be fast-paced page-turners, something that will keep your readers and non-readers on the edge of their seats.

The interactive website: www.SteveAlten.com offers supplemental information for each book, as well as educational links, contests for readers, exciting tours, background information on how I was published, and free downloadable images. Everything is designed to enhance your student's reading experience.

One of the best and most unique aspects of the Adopt-An-Author program is having direct access to a New York Times Best-Selling author. I invite your students to e-mail me. A link is provided on the website. I read each and every e-mail, then send out a reply to each letter, which I personalize. This is NOT an automated response. After four years of answering email, I know exactly what everyone wants to know. Second and third letters are handled differently.

All of my novels are part of the ACCELERATED READER program and the SCHOLASTIC READING COUNTS program.

As a former educator, it is my goal to provide teachers with a very unique program that combines thrilling novels with exciting curriculums and opportunities for students to converse with a best-selling author. I am personally financing this entire venture. This is my commitment to you. All I request is that (once you see the results) you simply spread the word about the program throughout your school and among your peers.

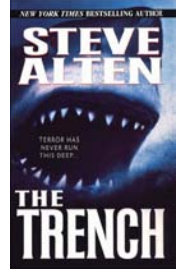
Please do not hesitate to contact me with any questions or input.

I think you will be impressed!

–Steve Alten

TRENCH CURRICULUM MATERIALS

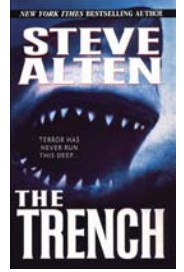
Because students also have access to this section, answers to questions will only be provided via e-mail (at your request) to teacher e-mail address registered in the Adopt-An-Author program.



Materials are divided as follows:

1. Characters
2. Chronological Events
3. Acronyms & Vessels
4. Vocabulary
5. True-False Questions
6. Discussion Points
7. Projects
8. Multiple Choice Questions
9. Science/Oceanography
10. Matching
11. Megalodon Shark Anatomy
12. Settings
13. How Deep Can They Go?
14. Creative Writing

TRENCH CHARACTERS



Major Characters:

Prof. Jonas Taylor

Terry Tanaka

Mac

Masao Tanaka

Benedict Singer

Celeste

Dief

Sergei

Dr. Maren

Minor Characters:

Harry Moon

Heath Williams

Captain Hoppe

Pete Soderblom

Andrew Furman

Big Daddy Wisdom

Dave Ross

Ken Berk

Barry Leace

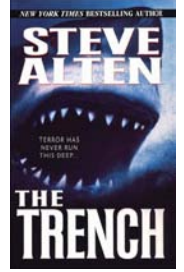
Ellis Richards

Linda Heron

Norton Binder

Bruce & Jan Henkel

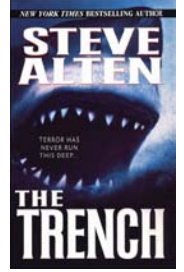
THE TRENCH CHRONOLOGICAL EVENTS



1. Retired Navy deep-sea pilot Barry Leace is piloting the _____.
2. Leace does not get along with _____, who he considers arrogant.
3. The sub is attacked in the _____.
4. Jonas Taylor is suffering from _____.
5. The name of the captured Megalodon pup is _____.
6. Masao Tanaka receives a fax from _____, ordering them to conduct an investigation regarding the submersible accident.
7. The Tanaka Institute is now owned by _____, who insists Jonas join him in the Mariana Trench.
8. Celeste originally comes from _____.
9. Benedict enjoys throwing around _____ phrases.
10. Benedict's eyes are _____, the color resulting from an industrial accident.
11. The three juveniles broke into the Institute and were _____.
12. _____ stays on board the Goliath with Benedict.
13. Benedict suspects Terry has glimpsed the Russian reactor, known as a _____.
14. Circling just outside the Megalodon's steel gate are dozens of _____.
15. _____ rescues Jonas from the above.
16. Terry descends into the Mariana Trench on-board the _____.
17. The huge submersible lab in the Trench is called the _____.
18. Veni, Vidi, Vici translates to: I _____, I _____, I _____.
19. Ken Berk nearly dies when he tries to assist a stranded _____.
20. _____ warns Terry that Sergei wants to kill her.
21. Cape _____, located off the Oregon/Washington coast, possesses some of the fiercest seas in North America.
22. Jonas believes he is destined to die in _____.
23. The four lifeforms that attack the Prometheus are scared off by the _____.
24. Sea World administrators believe Angel will hunt down Tootie, their _____.

25. Angel goes berserk, then attacks the tall ship, Lady Washington, mistaking it for a _____.
26. _____ attempts to use the AG-1 to lead Angel away, but dies in the process.
27. Terry learns that Heath Williams really works for _____.
28. The massive fossilized skull excavated by the Prometheus belonged to a _____, a type of marine reptile.
29. The crew of the William Beebe use a dead _____ as bait to catch Angel.
30. Jonas nearly dies in Alaska's Gulf from _____, caused by cold water.
31. Celeste drugs Jonas to learn the secret location of _____.
32. Terry learns Benedict is really searching the trench to find _____, which possess a rare blend of Helium-3 and deuterium.
33. The seismic area located around the Pacific Rim is nicknamed the _____.
34. The bull whale know as Mad Max is a _____ whale.
35. Angel returns to the Mariana Trench in order to _____.
36. In order to survive in the hangar, Terry hides in a _____.
37. Jonas and Terry escape in a pod, only to be engulfed by _____.
38. They are "rescued" by _____.
39. Angel gives birth to _____ male pups.

THE TRENCH ACRONYMS & VESSELS



Acronyms:

UNIS

JAMSTEC

AG I & AG II

GTI

SOSUS

ITER

Ships:

Proteus

Goliath

Prometheus

Epometheus

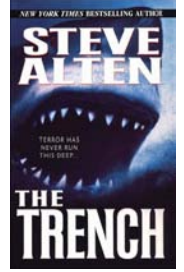
Benthos

William Beebe

Lady Washington

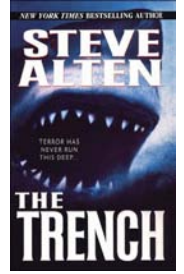
Cachalot

TRENCH VOCABULARY



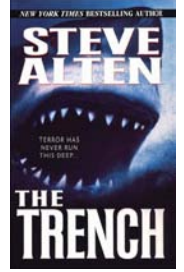
1. MOSSAD	p. 8	31. manganese	p. 342
2. hydrothermal vents	p. 8	32. heinous	p. 343
3. megaplumes	p. 9	33. isotope	p. 344
4. Cretaceous	p. 9	34. deduced	p. 344
5. Carcharodon Megalodon	p. 10	35. nodules	p. 344
6. Lexan	p. 19	36. primordial	p. 345
7. transom	p. 57	37. inert	p. 345
8. Tokamak	p. 75	38. affiliates	p. 347
9. ampullae of Lorenzini	p. 86	39. judicial	p. 347
10. Carcharodon Carcharius	p. 86	40. convergent	p. 351
11. pony bottle	p. 86	41. cetacean	p. 352
12. titanium	p. 95	42. leviathans	p. 353
13. anglerfish	p. 95	43. cachalot	p. 353
14. herbivores	p. 175	44. behemoths	p. 356
15. dragonfish	p. 176	45. serrated	p. 357
16. fusion	p. 233	46. girth	p. 358
17. deuterium	p. 233	47. ether	p. 363
18. tritium	p. 233	48. cryptogram	p. 366
19. Kronosaurus	p. 263	49. genus	p. 367
20. chemosynthesis	p. 265	50. bioluminescent	p. 368
21. transients	p. 272	51. mantra	p. 369
22. Mesozoic	p. 321	52. kaleidoscope	p. 373
23. hypothermia	p. 325	53. reconnaissance	p. 377
24. delirious	p. 329	54. insemination	p. 382
25. estrus	p. 330	55. Pliosaurus	p. 386
26. subducted	p. 339	56. surveillance	p. 393
27. gorge	p. 339	57. melancholy	p. 400
28. tectonic	p. 339	58. decapitated	p. 419
29. impregnable	p. 340	59. conical	p. 420
30. antechamber	p. 342	60. oblivion	p. 423

TRENCH TRUE-FALSE QUESTIONS



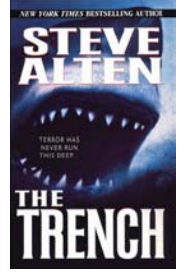
- True False 1. The Benthos is shaped like a giant sphere to better handle the pressures of the abyss.
- True False 2. Four years have passed since Jonas last piloted a submersible for the Navy.
- True False 3. Angel prefers the canal to the main tank.
- True False 4. Benedict Singer enjoys speaking Latin phrases.
- True False 5. Benedict Singer's eyes were always emerald.
- True False 6. Angel wants out because she is hungry.
- True False 7. Great white sharks are circling the canal because they are attracted to Angel's scent.
- True False 8. Terry insists on entering the Mariana Trench because she is afraid of her father.
- True False 9. The Epimetheus and Prometheus are names derived from Greek mythology.
- True False 10. The Megalodon's favorite foods are whales and sea lions, because it enjoys the taste of blubber.
- True False 11. The Megalodon's lateral line is a movement detector, capable of sensing prey miles away.
- True False 12. Mac thinks Jonas is suffering from "survivor's guilt."
- True False 13. Terry lies to JAMSTEC because she is afraid of losing their contract.
- True False 14. The huge fossil unearthed along the Mariana Trench sea floor belonged to a Megalodon.
- True False 15. Sea World's personnel accidentally net Angel.
- True False 16. Angel attacks the Lady Washington because she is hungry.
- True False 17. A Tokamak is a Russian fusion reactor.
- True False 18. Gasoline tanks are used to make the Benthos more buoyant.
- True False 19. Helium-3 is an element in great abundance on our planet.
- True False 20. Pressure within the Mariana Trench can reach 16,000 pound per square inch.

TRENCH DISCUSSION POINTS



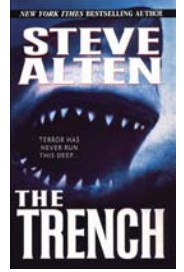
1. Why does Jonas Taylor refuse to return to the Mariana Trench?
2. If you could visit the bottom of the Mariana Trench in a submersible like the Benthos, would you go?
3. Is it easier to explore space than the bottom of the ocean? Why?
4. Why does the Mariana Trench remain unexplored? Should we explore it?

TRENCH PROJECTS



1. Create a detailed sketch of a scene in the book.
2. Write a biography on one of the main characters
3. Write two journal entries from a character's point of view.
4. Give a two-minute speech about the novel in front of the class
5. Create a collage based on the novel.
6. Make a papier mâché a replica of:
 - a) A Megalodon
 - b) A Megalodon tooth
 - c) A mini-sub
7. Contact the Author via e-mail and interview him.
8. Create a book cover design or movie poster.
9. Design a video game for The TRENCH.
10. Cast characters for The TRENCH movie.
11. Do a book report on:
 - a) Megalodon sharks
 - b) Deep-sea submersibles
 - c) Mariana Trench
 - d) Hydrothermal vents
 - e) Kronosaurs
12. Website assignments:
 - a) download a free image
 - b) write to the author
13. Write a scene you would like to see in a future MEG series book and e-mail it to the author.

TRENCH MULTIPLE CHOICE QUESTIONS



1. Pressure in the Mariana Trench can reach as high as:
 - A. 160 pounds per square inch
 - B. 1,600 pounds per square inch
 - C. 16,000 pounds per square inch
 - D. 160,000 pounds per square inch

2. Angel associates the voodoo drums with:
 - A. Feeding time
 - B. Whales
 - C. Escape
 - D. Mating rituals

3. Terry decides to join Benedict in the Mariana Trench because:
 - A. She wants to kill a Meg.
 - B. She wants to prove she's tough.
 - C. She's afraid JAMSTEC will cancel her father's contract.
 - D. She is angry with Jonas.

4. Life forms living in the abyss often glow to:
 - A. Attract prey
 - B. Attract mates
 - C. All of the above
 - D. None of the above

5. Great whites are circling outside of Angel's canal because:
 - A. They want to kill the Meg.
 - B. They are attracted by the voodoo drums.
 - C. They are attracted by Angel's estrus scent
 - D. They are hunting Jonas.

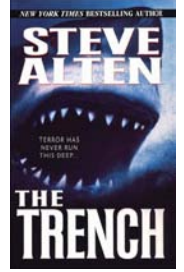
6. Jonas is convinced his nightmares are a warning that:
 - A. He is meant to die in the Trench.
 - B. He is meant to be devoured by a Megalodon.
 - C. All of the above.
 - D. None of the above.

7. Jonas secretly wants to:
 - A. Kill Celeste.
 - B. Kill Angel.
 - C. Marry Celeste
 - D. Retire and raise horses.

8. The Ring of Fire refers to:
 - A. Hydrothermal vents in the Mariana Trench.
 - B. Angel's jaws.
 - C. A volcanic area in the Pacific Rim
 - D. Jonas's engagement to Celeste.

9. Celeste learns Benedict is really:
 - A. Her brother
 - B. Jonas's father
 - C. Terry's uncle
 - D. Her father

10. In the final scene:
 - A. Angel saves Jonas
 - B. Angel kills Celeste
 - C. Jonas saves Terry
 - D. All of the above

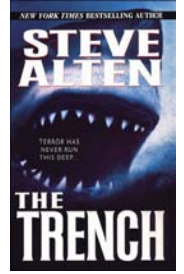
**Define the following:**

1. Deep sea trenches _____
2. Hydrothermal vents _____
3. Thermocline _____
4. Hadal zone _____
5. Challenger Deep _____
6. JAMSTEC _____
7. Bathyscape _____
8. Tube worms _____
9. Dermal denticles _____
10. Argonaut _____
11. Ring of Fire _____
12. Caudal Fin _____

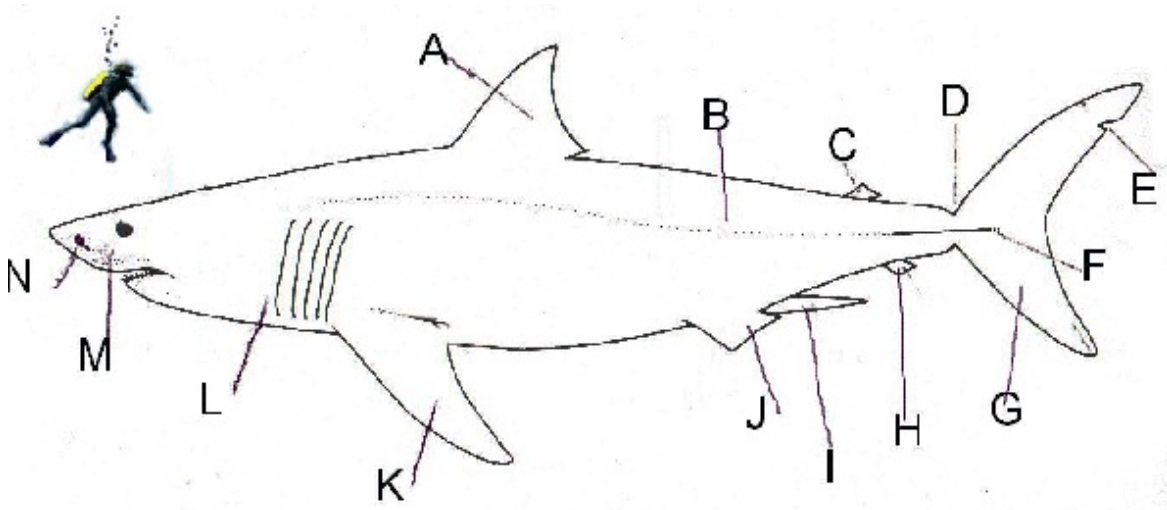
Matching:

- | | |
|-----------------------------|---|
| _____ Carcharodon Megalodon | A. Black smoker |
| _____ Kronosaurus | B. Back of the boat |
| _____ Hydrothermal vent | C. I came, I saw, I conquered (Latin) |
| _____ Veni, Vidi, Vici | D. Warm-cold layer |
| _____ Thermocline | E. Prehistoric Marine reptile |
| _____ Cetacean | F. Right side of a boat |
| _____ Prometheus | G. Stole the Sun's power and gave it to man |
| _____ Resurgam | H. Classification of whales |
| _____ Starboard | I. I shall rise again (Latin) |
| _____ Stern | J. Front of a boat |
| _____ Bow | K. Left side of a boat |
| _____ Port | L. Prehistoric cousin of Great White Shark |

THE TRENCH MEGALODON SHARK ANATOMY

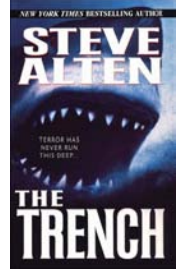


- | | | |
|------------------------|-----------------------------|--------------------|
| _____ Nostrils | _____ Caudal Fin | |
| _____ Pre-caudal Notch | _____ Lateral Line | _____ Anal Fin |
| _____ Pelvic Fin | _____ Clasper (males only) | _____ Caudal Notch |
| _____ Gill Slits | _____ Second Dorsal Fin | _____ Caudal Keel |
| _____ Dorsal Fin | _____ Ampullae of Lorenzini | _____ Pectoral Fin |

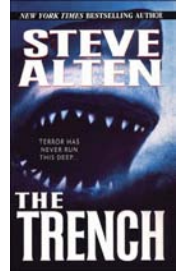


THE TRENCH – SETTINGS

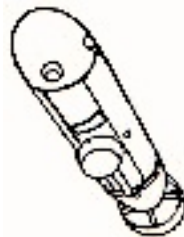
1. Hadal Zone
2. Mariana Trench
3. Cape Disappointment
4. Tanaka Oceanographic Institute
5. Tanaka Lagoon
6. Gray's Harbor
7. Hydrothermal vents
8. Barkley Sound
9. Gulf of Alaska
10. Ring of Fire



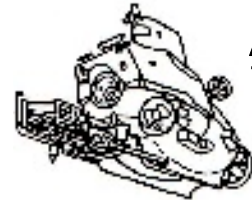
THE TRENCH – How Deep Can They Go?



- | | | | | |
|-----------|----------------------|-----------------|----------------|----------------|
| _____ 1. | Man (no gear) | A. 10 feet | B. 40 feet | C. 150+ feet |
| _____ 2. | SCUBA diver | A. 40 feet | B. 165 feet | C. 300 feet |
| _____ 3. | JIM Diving suit | A. 400 feet | B. 700 feet | C. 2,000 feet |
| _____ 4. | Nuclear submarine | A. 900-1200 ft. | B. 2,000 feet | C. 5,000 feet |
| _____ 5. | DSRV rescue sub | A. 2,000 feet | B. 5,000 feet | C. 10,000 feet |
| _____ 6. | Sperm Whales | A. 200 feet | B. 1,000 feet | C. 4,000 feet |
| _____ 7. | ALVIN submersible | A. 13,000 feet | B. 20,000 feet | C. 30,000 feet |
| _____ 8. | Nautilus submersible | A. 15,000 feet | B. 19,500 feet | C. 30,000 feet |
| _____ 9. | Trieste bathyscaphe | A. 15,000 feet | B. 35,800 feet | C. 41,200 feet |
| _____ 10. | Mariana Trench | A. 30,500 feet | B. 35,800 feet | C. 41,200 feet |



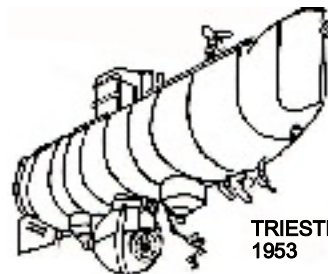
DSRV-1
1965



ALVIN
1984

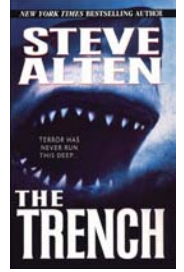


JIM
1971



TRIESTE
1953

TRENCH CREATIVE WRITING



Assignment:

Create your own Megalodon shark attack scene. Be sure to include:

- a) Characters involved
- b) Setting
- c) Vantage Point of:
 - 1) Victims
 - 2) Megalodon
 - 3) Third Person Narrative