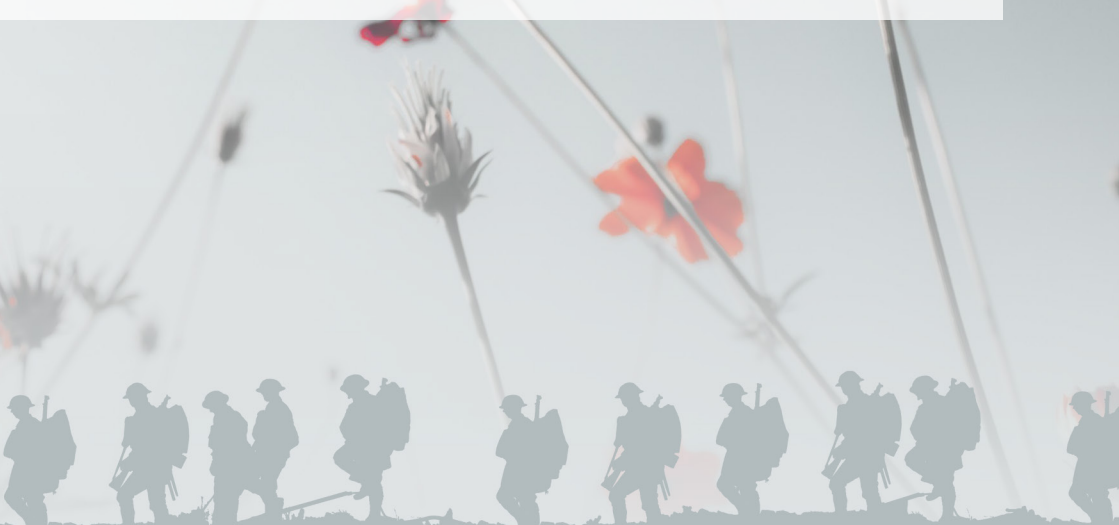




WORLD WAR 100<sup>+</sup>  
CASUALTY CLEARING STATION GAME



# TEACHER'S HANDBOOK REFERENCE & ANSWERS



KS3



## CASUALTY CLEARING STATION BOARD GAME

Thank you for choosing to play the Casualty Clearing Station Board Game to engage your KS3 students with both Mathematics and History in a fun and informative way.

We hope that they enjoy the game, and that they also gain some valuable insights into the role of a Royal Army Medical Corps Medical Officer (MO) in charge of a Casualty Clearing Station in the First World War.



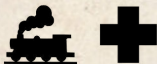

Within this booklet you will find all the information you should need about playing the game including the answer sheets and a little historical context.

## HISTORICAL CONTEXT

In 1916, 734,000 men were wounded and evacuated from Casualty Clearing Stations by a range of means such as trains and barges. As the war progressed and treatment of regiments became more sophisticated and refined, Casualty Clearing Stations became self-contained treatment centres carrying out amputations and treatment of bullet trauma wounds. On the basis of selection and referral, the MOs would perform surgery and triage based on the following general principles:





	Is the soldier strong enough to be treated by you and your staff at the Casualty Clearing Station before being returned to fight on the Front Line?
	The soldier has injuries bad enough to be sent to the base hospital for further treatment.
	The soldier's injuries are so bad that he needs to go to the base hospital, and he will also need a minor operation before he travels.
	Are the soldier's chances of survival so bad that palliative care is the only option? It's a tough decision.

## GUIDANCE AND INSTRUCTIONS FOR TEACHERS

This game is designed for students of Key Stage 3 Mathematics and focuses on the probability of the survival of injured soldiers sent to a Casualty Clearing Station in the First World War. While the patients are fictitious, the probabilities of survival have been based upon the serious injuries acquired at this time.

The aim of the game is for each MO pair to correctly calculate the best referral choice (as above) for each patient based on the highest probability of survival, and to complete as many patients in the time allotted to the exercise (until YOU tell them to stop!).

The winner of the game is the MO team with the highest number of correct answers shown as percentages in the lowest time. If there is a tie, there is a short quiz on page 4 to decide the winner.



## YOU'RE IN CHARGE: DIFFICULTY LEVELS

As the teacher, it is for you to decide how difficult the game is for your students. If you have a low ability group, you may want to play only with the EASY patient cards; this will ensure only one level of percentage calculations. For a high ability group you can ask them to treat both HARD and EASY patients. The HARD patients include added levels of difficulty, including multiple injuries, and the added complications of shock and infection. All instructions for calculating these difficulties are given within the student gameplay instructions.

YOU will decide how long the students play the game for. At the end of gameplay, remember to leave them time for calculating their time score (they will have collected bonuses and penalties as they play).

Some HARD patients have associated wound shock and infection levels. You can make the game quicker by asking them to ignore the infection. This will take away one level of subtraction at the end.

If there is a tied score (so two teams with the same number of correct answers and time score), you can add an element of challenge with the small quiz below. Much if not all of the information to answer these questions will have been given to them during gameplay.

























## QUIZ

- Q1. How old did you have to be to become a member of the Royal Army Medical Corps?
- A. Under 30 years old.
- Q2. How many casualties did a typical Casualty Clearing Station hold at any one time?
- A. 1,000.
- Q3. How many casualties were moved by train to base hospitals in 1916?
- A. Over 700,000.
- Q4. How could you identify the location of a Casualty Clearing Station now?
- A. Clusters of military cemeteries surrounding the site.
- Q5. True or False? Casualty Clearing Stations were always at a fixed location, and could not be moved.
- A. False.

## EASY ANSWERS

FIRST NAME	SURNAME	RANK	INJURY / CONDITION
Frederick	Atkinson	Private	Typhus
William	Bellairs	Private	Severe head wound
Digby A.	Brown	Lieutenant Colonel	Shrapnel in chest (severe)
Austin T.	Carpenter	Captain	Trench Foot
Marmaduke	Carter	Major	Dysentery
Stanley R.	Cottage	Colonel	Non-severe head wound
James	Dyer	Private	Chlorine gas poisoning
George	Ford	Medical Orderly	Lost lower leg
Bernard	Hills	Private	Shrapnel in lower leg
John	Meeks	Private	Shrapnel in chest (non-severe)
Joseph	Moore	Private	Stomach wound
James	Morrell	Second Lieutenant	Minor burns to hands
Frank	Small	Lieutenant	Gunshot to upper arm
Wilfred	Smith	Private	Frostbite
Henry A.	Spinks	Captain	Crushed upper leg
Ralph	Unwin	Second Lieutenant	Stomach wound



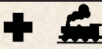
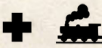
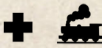




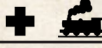
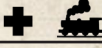







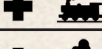

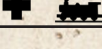
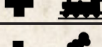
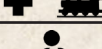



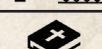
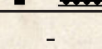




	INFECTED	ANSWER	REFERRAL
	-	80%	
	No	11%	
	No	28%	 
	-	91%	 
	No	83%	
	No	75%	
	-	70%	
	No	52%	 
	No	81%	
	No	77%	
	No	11%	
	No	95%	
	No	85%	 
	-	88%	
	No	11%	
	No	11%	

# HARD ANSWERS

FIRST NAME	SURNAME	RANK	INJURY / CONDITION
Cecil R.	Baxter	Second Lieutenant	Minor burns to hands
James	Bridge	Second Lieutenant	Gunshot to upper arm; trench foot
Arthur H.	Crawley	Lieutenant	Gunshot to upper arm
Walter	Evans	Private	Severe burns
Albert	Hatch	Major	Crushed upper leg
Cyril	Howlett	Private	Shrapnel in chest (severe)
Thomas	Jackson	Private	Stomach wound; wound shock
Joseph	Jones	Lance Corporal	Severe head wound
Alfred	Jones	Second Lieutenant	Shrapnel in chest (non-severe)
Reginald	Kidman	Private	Non-severe head wound
James	Laidlaw	Lieutenant	Shrapnel in lower leg; wound shock
Charles	Lenton	Private	Lost Lower leg; wound shock
Giles	Loakes	Private	Gunshot to upper arm; wound shock
John	Lucas	Private	Trench foot; shrapnel in leg
Edward	Munn	Private	Shrapnel in lower leg
Robert	Oake	Private	Severe burns; wound shock
Thomas	Pamonter	Private	Severe head wound; stomach wound
Sidney C.	Smith	Colonel	Lost lower leg
Jack	Spall	Captain	Severe head wound; wound shock
William	Young	Private	Severe burns; wound shock



	The columns below show correct referrals and survival percentages for multiple injuries and if in wound shock ('yes' in wound shock column).			The columns below show correct referrals and survival percentages for multiple injuries and if in wound shock		
	WOUND SHOCK?	ANSWER	REFERRAL	INFECTED?	ANSWER (Infection subtracted)	REFERRAL
	-	95%		Yes	95%	
	-	77%		-	-	-
	-	85%		Yes	80%	
	-	25%		Yes	15%	
	-	11%		Yes	1%	
	-	28%		Yes	22%	
	Yes	1%		-	-	-
	-	11%		Yes	1%	
	-	77%		Yes	71%	
	-	75%		Yes	71%	
	Yes	81%		-	-	-
	Yes	46%		Yes	38%	
	Yes	79%		-	-	-
	-	74%		-	-	-
	-	81%		-	-	-
	Yes	15%		-	-	-
	-	1%		-	-	-
	-	52%		Yes	44%	
	Yes	1%		-	-	-
	Yes	15%		-	-	-



## GAME CONTENTS

1 x Playing board

1 x Teacher's guide

1 x Booklet: 'Treatment of Injuries on the Battlefield'

2 x Students' handbooks (1 for each MO pair)

2 x Shared dice

2 x Playing pieces (1 for each MO pair)

36 x Patient cards (20 x Hard, 16 x Easy)

17 x Fate cards

2 x Blank MO dry wipe charts

2 x Dry wipe marker pens

1 x Game clock (plus 1 x battery)





## ACKNOWLEDGMENTS

The Polesworth School  
Lizzie Carpenter  
Alex Old  
Tudor Grange Academy Worcester  
(Game concept & testing)

Travis R R Hurlock  
[www.travishurlock.com](http://www.travishurlock.com)  
(Designer)

MLA Science in Your World  
Heritage Lottery Fund  
(Funders)





# WORLD WAR 100<sup>+</sup>

CASUALTY CLEARING STATION GAME



THE GEORGE MARSHALL  
MEDICAL MUSEUM  
250 Years of Medical History

