# **Bork Flips**

# By Christopher Cotton

Outside of the kitchen, the Swedish Chef enjoys watching international sporting events. He managed to pull a few strings to get front-row seats at a recent gymnastics competition and spent the course of the three-day competition scribbling down the results. However, his note-taking is as messy as his kitchen. After the event was over, he had no idea what happened. (His memory isn't too keen either.) It was clear that over the three main events, nine different gymnasts from nine different countries each earned a single medal, but it wasn't clear who won which medal for which event. It's likely his notes are enough to reconstruct the results.

#### Here are his notes:

- 1 Natalia medaled in Balance Beam.
- 2 Jaime from Germany medaled on a later day than Austria's competitor did.
- 3 Rosa competed for Ecuador, and Udaya competed for India.
- 4 Both Olga and the gymnast from Kosovo received bronze medals.
- 5 Vietnam, Switzerland, and Hungary all earned different medals in different events. 6 Both the gymnast from Austria and Wilma received gold medals.
- 7 Jaime did not compete in the Vault, as she previously had a bad experience with it. 8 China did not earn a bronze medal.
- 9 Tamaya medaled on a later day than Daphne.
- 10 Olga from Hungary only competed on either the Balance Beam or Vault.
- 11 Neither Ysabel from Vietnam nor Udaya earned a medal in the Floor Exercise.
- 12 The gymnast from Hungary did not medal in the same event as Natalia.
- 13 Switzerland, Germany, and China either medaled all in the same event, or all in different events.
- 14 The gymnast from India placed lower than Natalia, but not in the same event.

	Balance Beam (D	Day 1)	Floor Exercise	e (Day 2)	Vault (Day 3)	
	Country	Gymnast	Country	Gymnast	Country	Gymnast
Gold	Austria	Natalia	Switzerland	Wilma	Ecuador	Rosa
Silver	Vietnam	Ysabel	China	Tamaya	I <mark>n</mark> dia	U <mark>d</mark> aya
Bronze	Kosovo	Da <mark>p</mark> hne	Germany	Jaime	Hungary	Olga

Solution is above, and using Gold (1) Silver (2) and Bronze (3), you can pull out the letters to spell ANSWER IS HANDSPRING.

How to fill out the grid (there are more ones than this to fill it out, but this is one solution):

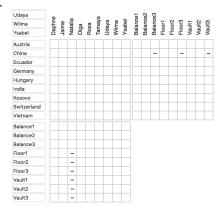
#### 8. China did not earn a bronze medal.

Can mark off all 3 bronze medals.

ramaya																		
Udaya	o o		_			æ				e1	62	63						
Wilma	Daphne	me	talia	g	Sa	nay	aya	ma	ape	Balance1	anc	anc	10	or2	03	Ę	댐	113
Ysabel	Da	Jai	Sa	ŏ	8	ā	Ď	₹	Ϋ́	Bal	Bal	Bal	윤	윤	은	Val	Vai	ζai
Austria																		
China												-			-			-
Ecuador																		
Germany																		
Hungary																		
India																		
Kosovo																		
Switzerland																		
Vietnam																		
Balance1																		
Balance2																		
Balance3																		
Floor1																		
Floor2																		
Floor3																		
Vault1																		
Vault2																		
Vault3																		

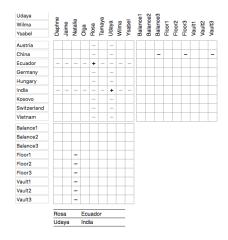
#### 1. Natalia medaled in Balance Beam.

Mark off Floor and Vault from Natalia.



# 3. Rosa competed for Ecuador, and Udaya competed for India.

Can assign Rosa and Udaya.



# 10. Olga from Hungary only competed on either the Balance Beam or Vault. Olga assigned to Hungary, and mark off Floor from Olga and Hungary.

Udaya						œ				61	8	83						
Wilma	Daphne	ше	talia	Ø	Sa	nay	aya	ша	Ysabel	anc	auc	anc	or1	or2	or3	Ę	길	13
Ysabel	Da	Jaji	Na	õ	å	ā	Ď	₹	Ys	Ba	Ba	Ba	윤	윤	윤	Val	Val	Val
Austria				-	-		-											
China				-	-		-					-			-			-
Ecuador	_	-	-	-	+	_	-	-	-									
Germany				-	-		-											
Hungary	-	-	-	+	-	-	-	-	-				-	-	-			
India	-	-	-	-	-	-	+	-	-									
Kosovo				-	-		-											
Switzerland				-	-		-											
Vietnam				-	-		-											
Balance1																		
Balance2																		
Balance3																		
Floor1			-	-														
Floor2			-	-														
Floor3			-	-														
Vault1			-															
Vault2			-															
Vault3			-															
	Olg	19		Hu	nga	irv			-									
	Ro		_		uad			_	-									
	_	aya		Ind					-									

7. Jaime did not compete in the Vault as she previously had a bad experience with it.

Mark off Jaime from Vault.

Udaya	9					gđ			_	<u>6</u>	62	8						
Wilma	Daphne	me	talia	ag	Sa	nay	aya	ma	ape	Balance1	and	anc	Po-	or2	or3	득	묕	뜶
Ysabel	Da	Jai	Na	ŏ	æ	ā	ñ	\$	Ϋ́	Ba	Ba	Ba	윤	윤	윤	Λa	Va	Val
Austria				-	-		-			Г								
China				-	-		-					-			-			-
Ecuador	-	-	-	-	+	-	-	-	-									
Germany				-	-		-											
Hungary	-	-	_	+	-	_	-	-	_				_	-	-			
India	_	-	-	-	-	-	+	-	_									
Kosovo				-	-		-											
Switzerland				-	-		-											
Vietnam				-	-		-											
Balance1																		
Balance2																		
Balance3																		
Floor1			-	-														
Floor2			-	-														
Floor3			-	-														
Vault1		-	-															
Vault2		-	-															
Vault3		-	-															
	Olg	_	_	Lib.	nga		_	_										
	Ros				nga uad													
	Udi			Ind		UI.												

# 11. Neither Ysabel from Vietnam nor Udaya earned a medal in the Floor Exercise.

Ysabel assigned to Vietnam, and remove Floor from both competitors and their countries.

Udaya	m					œ				e1	82	63						
Wilma	Daphne	me	Natalia	g	Sa	nay	aya	ma	apel	Balance1	ano	ano	or1	or2	or3	Ę	III2	113
Ysabel	Da	Jai	Na	ŏ	æ	펼	Ď	₹	Ϋ́	Ba	Ba	Ba	윤	Floor2	윤	Vai	Val	Val
Austria				-	-		-		-									
China				-	-		-		-			-			-			-
Ecuador	-	-	-	-	+	-	-	-	-									
Germany				-	-		-		-									
Hungary	-	-	-	+	-	-	-	-	-				-	-	-			
India	-	-	-	-	-	-	+	-	-				-	-	-			
Kosovo				-	-		-		-									
Switzerland				-	-		-		-									
Vietnam	-	-	-	-	-	-	-	-	+				-	-	-			
Balance1				Г														
Balance2																		
Balance3																		
Floor1			-	-			-		-									
Floor2			-	-			-		-									
Floor3			-	-			-		-									
Vault1		-	-															
Vault2		-	-															
Vault3		-	-															
	Olo	ıa	-	Hu	nga	ırv	-	_	-									
	Ro				uad				-									
	Ud	aya		Inc	lia				-									
	Ysa	abel		Vie	etna	m			-									

# 4. Both Olga and the gymnast from Kosovo received bronze medals.

Olga either gets the bronze medal in Balance or Vault. Mark off gold and silver from Kosovo.

Udaya	o o		_			a				e1	e2	63						
Wilma	Japhne	ше	Natalia	Olga	sa	nay	aya	ma	ape	Balance1	Balance2	anc	P.	or2	03	폭	댐	133
Ysabel	Da	Jai	Na	õ	æ	Tamaya	Š	₹	Ϋ́S	Bal	Bal	Bal	Floor1	윤	윤	Vai	Vai	Vai
Austria				-	-		-		-									
China				-	-		-		-			-			-			-
Ecuador	-	-	-	-	+	-	-	-	-									
Germany				-	-		-		-									
Hungary	-	-	-	+	-	-	_	-	-	_	-		-	-	_	-	-	
India	-	-	-	-	-	-	+	-	-				-	-	-			
Kosovo				-	-		-		-	-	-		-	-		-	-	
Switzerland				-	-		-		-									
Vietnam	-	-	-	-	-	-	-	-	+				-	-	-			
Balance1				-														
Balance2				-														
Balance3																		
Floor1			-	-			-		-									
Floor2			-	-			-		-									
Floor3			-	-			-		-									
Vault1		-	-	-														
Vault2		-	-	-														
Vault3		-	-															
	-	_	_		_	_	_	_	_									
	Olg				nga				-									
	Ro			_	uad	or			-									
		aya	_	Inc					_									
	Ysi	abel		Vie	etna	m												

# 12. The gymnast from Hungary did not medal in the same event as Natalia.

Natalia medaled in the Balance event, which means that Olga from Hungary had to receive the bronze medal in Vault.

Udaya	0					œ				e1	62	8						
Wilma	Daphne	me	talia	Olga	Sa	nay	aya	ma	apel	3alance1	Balance2	anc	or1	or2	or3	득	Vault2	Vault3
Ysabel	Da	Jaji	Na	õ	ê	ā	Š	₹	ΥS	Bal	Bal	Bal	윤	윤	윤	Val	Val	Val
Austria				-	-		-		-									-
China				-	-		-		-			-			-			-
Ecuador	-	-	-	-	+	-	-	-	_									-
Germany				_	-		-		_									-
Hungary	_	-	_	+	-	-	-	_	_	_	_	-	-	_	_	_	-	+
India	_	-	-	-	-	-	+	-	-				-	-	-			-
Kosovo				-	-		-		-	-	-		-	-		-	-	-
Switzerland				-	-		-		-								Г	-
Vietnam	-	-	-	-	-	-	-	-	+				-	-	-			-
Balance1				-														
Balance2				-														
Balance3				-														
Floor1			-	-			-		-									
Floor2			-	-			-		-									
Floor3			-	-			-		-									
Vault1		-	-	-														
Vault2		-	-	-														
Vault3	-	-	-	+	-	-	-	-	_									
	Olg				nga			Vau	lt3	_								
	Ud	aya		Inc	lia					_								
		abel		Vie	etna	m												

14. The gymnast from India placed lower than Natalia, but not in the same event.

Since Natalia is in the the Balance event, India (Udaya) placed in the Vault. Since she placed lower and there are only 1st and 2nd available, then Udaya got 2nd in Vault and Natalia must have gotten 1st in Balance.

got 2r Udaya				u												٠.	٠.	
Wilma	Japhne	Jaime	Natalia	a	Rosa	Tamaya	aya	Wilma	Ysabel	3alance1	Balance2	Balance3	Floor1	Floor2	Floor3	Vault1	/ault2	Vault3
Ysabel	Da	Jai	Na	Olga	å	<u>r</u> g	Ö	₹	Ys	Bal	Bal	Bal	윤	윤	윤	Val	Val	Λaι
Austria		П	Г	-	-		-		-					Г	П	Г	-	-
China				-	-		-		-			-			-		-	-
Ecuador	-	-	-	-	+	-	-	-	-	-							-	-
Germany				-	-		-		-								-	-
Hungary	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	+
India	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-
Kosovo			-	-	_		_		-	-	-		-	-		-	-	_
Switzerland				-	-		-		-								-	-
Vietnam	-	-	-	-	-	-	-	-	+	-			-	-	-		-	-
Balance1	-	-	+	-	-	-	-	-	-									
Balance2			-	-			-											
Balance3			-	-			-											
Floor1			-	-			-		-									
Floor2			-	-			-		-									
Floor3			-	-			-		-									
Vault1		-	-	-			-											
Vault2	-	-	-	-	_	-	+	-	-									
Vault3	-	-	-	+	-	-	-	-	-									
	Olg	a		Н	ınga	irv		Vau	lt3		_							
		aya		Inc		_		Vau			_							

# 2. Jaime from Germany medaled on a later day than Austria's competitor did.

Jaime is assigned to Germany. Jaime can only medal in Balance or Floor, since she needs to go after Austria, she must be Floor, which means that Austria medaled in Balance.

Udaya	0		_			ø				e-	62	63						
Wilma	Daphne	Jaime	Vatalia	Olga	Sa	nay	Udaya	ma	ge	Balance1	Balance2	3alance3	P.	975	03	Vault1	갩	Vault3
Ysabel	Da	Jai	Na	õ	å	Tar	Š	₹	ΥS	Bal	Bal	Bal	윤	윤	윤	Vai	Vai	Vai
Austria		_		-	-		-		-				-	-	-	-	-	-
China		-		-	-		-		-			-			-		-	-
Ecuador	-	-	-	-	+	-	-	-	-	-							-	-
Germany	-	+	-	-	-	-	-	-	-	-	-	-				-	-	-
Hungary	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	+
India	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-
Kosovo		-	-	-	-		-		-	-	-		-	-		-	-	-
Switzerland		_		-	-		_		-								-	_
Vietnam	-	_	_	-	-	-	_	-	+	-			_	_	-		-	_
Balance1	-	-	+	-	-	-	-	-	-									
Balance2		-	-	-			-											
Balance3		-	-	-			-											
Floor1			-	-			-		-									
Floor2			-	-			-		-									
Floor3			-	-			-		-									
Vault1		-	-	-			_											
Vault2	_	-	-	-	-	_	+	-	_									
Vault3	-	-	-	+	-	-	-	-	-									
	Olg		_	ш	ınga	nn.	_	Vai	ılto		_							
		aya		Inc		шу		Vai			_							
	Jai				erma	anv		·u			_							
	-	talia						Bal	anc	e1	-							
	Ro	sa		Ec	uac	lor					_							
		abel	_	VE.	etna						_							

#### 6. Both the gymnast from Austria and Wilma received gold medals.

Since Austria received a gold medal and is only in the Balance event, then Natalia must assigned to Austria. Wilma can only win either the Floor or Vault, can mark off the other event positions.

Udaya	m					m				<u>-</u>	62	8						
Wilma	Daphne	Jaime	Natalia	ಹ	g	Tamaya	Udaya	Ta	Ysabel	ano	3alance2	3alance3	E	짆	Floor3	₩	旦	Varille
Ysabel	Dap	Jair	Nat	Olga	å	Tan	Š	⋚	Ysa	Balance1	Bal	Bal	Floor1	윤	Ē	Vau	Vau	/
Austria	-	_	+	_	_	_	-	-	-	+	_	-	-	-	-	-	_	-
China		-	_	_	_		-		-	-		-			-		_	-
Ecuador	_	-	_	_	+	_	-	-	-	-							_	-
Germany	_	+	_	-	-	_	-	-	-	-	-	-				-	_	
Hungary	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	
India	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-
Kosovo		-	-	-	-		-	-	-	-	-		-	-		-	-	
Switzerland		-	-	-	-		-		-	-							-	
Vietnam	-	-	-	-	-	-	-	-	+	-			-	-	-		-	
Balance1	-	-	+	-	-	-	-	-	-									
Balance2		-	-	-			-	-										
Balance3		-	-	-			-	-										
Floor1			-	-			-		-									
Floor2			-	-			-	-	-									
Floor3			-	-			-	-	-									
Vault1		-	-	-			-											
Vault2	-	-	-	-	-	_	+	-	-									
Vault3	-	-	-	+	_	-	-	-	-									
	Nat	talia		Au	stria	а		Bal	ance	e1	-							
	Olg	a		Hu	inga	ary		Vai	ılt3		_							
		aya			dia			Va	ılt2		_							
	Jai	me		Ge	erma	any					_							
	Da	~~		E														

#### 5. Vietnam, Switzerland, Hungary all earned different medals in different events.

Hungary has the Bronze in Vault. Which means Vietnam cannot medal in the Vault, which only leaves the Balance event. Since the Bronze is gone, Vietnam must get the silver. Which means Switzerland must get the Gold medal in the Floor.

Udaya			_			æ			_	e1	e2	83						
Wilma	Daphne	Jaime	talia	Olga	Rosa	nay	Udaya	ша	Ysabel	Balance1	Balance2	3alance3	or1	or2	Floor3	Ę		Vault3
Ysabel	Dai	Jaji	Na	õ	Ë	Ţ,	Ď	₹	Ϋ́S	Ba	Ba	Ba	윤	윤	윤	Val	Vai	Val
Austria	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
China		-	-	-	-		-		-	_	-	-	-		-		-	-
Ecuador	-	-	-	-	+	-	-	-	-	-	-		-				-	-
Germany	-	+	-	-	-	-	-	-	-	-	-	-	-			-	-	-
Hungary	-	-	-	+	-	-	-	-	-	_	-	-	-	-	-	-	-	+
India	-	-	-	-	-	-	+	-	-	_	-	-	-	-	-	-	+	-
Kosovo		-	-	-	-		-	-	-	-	-		-	-		-	-	-
Switzerland		-	-	-	-		-		-	-	-	-	+	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-
Balance1	-	-	+	-	-	-	-	-	-									
Balance2	-	-	-	-	-	-	-	-	+									
Balance3		-	_	-			-	-	-									
Floor1		-	-	-	-		-		-									
Floor2			-	-			-	-	-									
Floor3			-	-			-	-	-									
Vault1		-	-	-			-		-									
Vault2	-	-	-	-	-	-	+	-	-									
Vault3	-	-	-	+	-	-	-	-	-									
	Nat	talia		Au	stri	a		E	Balai	nce1		-						
	Olg	a		Нι	ınga	ary		١	/ault	3								
		aya		Inc	dia			١	/ault	2								
	-	abel			etna			Ī	Balai	nce2	2	_						
	Jai				erma													
	Ro	sa			uac													
				Sv	vitze	erlar	nd		loor	1_		_						

#### 13. Switzerland, Germany and China either medaled all in the same event, or all in different events.

Since Switzerland and Germany are both medaling in the Floor, then China must also medal in the floor, which gives the Silver in the Floor. Germany must get the Bronze in the Floor. That leaves just Ecuador who can receive the Gold in Vault. It also only leaves Bronze in Balance for Kosovo. Since Wilma only has the Gold in the Floor open, it means Wilma is also assigned to Switzerland.

Udaya	e		æ			ď,	_	_	_	9	95	83			_			_
Wilma	Daphne	me	Natalia	ga	Sa	Tamaya	aya	ma	ape	Balance	Balance2	Balance3	Floor1	20	8	Vault1	욬	돮
Ysabel	Da	Jai	ž	ō	æ	Ē	5	₹	Ϋ́	Ba	Ba	Ba	Ĕ	Ĕ	Ĕ	Ş	Ş	Š
Austria	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
China		-	-	-	-		-	-	-	-	-	-	-	+	-	-	-	-
Ecuador	-	-	-	-	+	-	_	-	_	-	-	-	-	-	-	+	-	-
Germany	-	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
Hungary	_	-	-	+	-	_	-	-	-	-	-	-	-	-	-	-	-	+
India	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-
Kosovo		-	-	-	-		-	-	-	-	-	+	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-
Balance1	-	-	+	-	-	-	-	-	-									
Balance2	-	-	-	-	-	-	-	-	+									
Balance3		-	-	-	-		-	-	-									
Floor1	-	-	-	-	-	-	-	+	-									
Floor2		-	-	-	-		-	-	-									
Floor3	-	+	-	-	_	-	-	-	-									
Vault1	-	-	-	-	+	_	_	-	_									
Vault2	-	-	-	-	_	_	+	-	_									
Vault3	-	-	-	+	-	-	-	-	-									
	Jai	me		Ge	erma	any		F	loo	r3		-						
	Na	talia		Au	stria	a			3ala	nce1		_						
	Olg	a		Hu	ınga	iry		١	/ault	3								
	Ro				uad	or			/ault									
		aya		Inc				_	/ault	_		_						
	Wil				vitze		nd		loo	_								
	Ysa	abel			etna	m		_		nce2	!	_						
				Ch	nina			_	loo	r2		_						

# 9. Tamaya medaled on a later day than Daphne.

Since Tamaya competes after Daphne, then Daphne must take the bronze in Balance, which means Daphne will be assigned to Kosovo. Tamaya will be Bronze in the Floor event, and assigned to China.

Udaya	0		_			ø				e1	62	63						
Wilma	Daphne	Jaime	Natalia	Olga	g	nay	Udaya	ma	apel	Balance1	3alance2	3alance3	Floor1	or2	or3	Vault1	길	Vault3
Ysabel	Da	Jai	Na	õ	B	Ī	ñ	₹	ΥS	Ba	Ba	Ba	윤	윤	윤	Val	Val	Vai
Austria	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
China	-	-	-	-	-	+	-	-	-	-	-	-	-	+	-	-	-	-
Ecuador	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-	-
Germany	-	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
Hungary	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	+
India	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	-
Kosovo	+	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	-
Vietnam	-	_	-	-	_	_	_	-	+	-	+	_	_	-	-	-	-	-
Balance1	-	_	+	-	-	_	-	-	-									
Balance2	-	-	-	-	-	_	_	-	+									
Balance3	+	-	-	-	-	_	_	-	-									
Floor1	-	-	-	-	-	-	-	+	-									
Floor2	-	-	-	-	-	+	-	-	-									
Floor3	-	+	-	-	-	_	-	-	-									
Vault1	-	-	-	-	+	_	_	_	-									
Vault2	-	-	-	-	-	_	+	-	-									
Vault3	-	-	-	+	-	-	-	-	-									
	Daphne			K	Kosovo			_	Balance3									
	Jaime		Germany				Floor3				_							
	Natalia Olga Rosa Tamaya Udaya Wilma Ysabel				Austria				Balance1									
				Hungary			Vault3											
				Е	Ecuador China India Switzerland			Vault1 Floor2 Vault2										
				С														
												_						
								Floor1										
				V	Vietnam				Balance2									

Now the answer can be read from the filled in grid.