

The 18xx games are in order of starting from p3 onwards. RR2489HS2 is on p7 & 8, Outpost M18 is on p9, St. Petersburg M6 is on p10, St. Petersburg M7 is on p11. The Games That You Play is below.

New Games: In The Year Of The Dragon M4 starts below.

Last time I pondered on a characteristic of a numerical keypad - take any sequence of four numbers that form a rectangle in the keypad and that number will be divisible by 11 - and said that it "can no doubt be explained".

Steve T, Dane M & Ian P did just that and their explanations are on page 2. My appreciation to them. I did not know - to any degree of consciousness - that a test for divisibility by 11 is to add the odd digits in a number, add the even digits, subtract one total from the other, repeat as necessary and if the result is a multiple of 11 (including zero) then the number is a multiple of 11. I have lived and I have learned.

IN THE YEAR OF THE DRAGON M4**GAMESTART**

You are, in initial starting order, Brad Martin, Mike Ruffhead & John Webley.

The three of you played in the last Minstrel In The Year Of The Dragon game which started in December 2013. As was the case then, we will execute the initial (Younger) Person choices by email. The starting instructions will be found in an email near you at this time. Any queries - just let me know.

In the year ahead each pair of events occur within two months of each other except for Drought which makes itself felt in months four and eleven. That is just how it is going to be.

IN THE YEAR OF THE DRAGON M4

NEXT – INITIAL PERSON CHOICES BY EMAIL

THE GAMES THAT YOU PLAY

Andy Muir	1830Y43
Brad Martin	St. Petersburg M6, St. Petersburg M7, In The Year Of The Dragon M4
Christian Bien	
Dane Maslen	Outpost M18
David Hooton	1856O43, 1829R43, RR2489HS2, Outpost M18
Graham Lee	1835B44
Ian Pendlebury	1856O43, Outpost M18
John Shelley	1856O43, 1829R43, 1830Y43, 1835B44
John Webley	1835B44, RR2489HS2, Outpost M18, St. Petersburg M6, St. Petersburg M7, In The Year Of The Dragon M4
Mark Hancock	1856O43
Mick Haytack	Outpost M18, St. Petersburg M6, St. Petersburg M7
Mike Bennett	1856O43, 1830Y43
Mike Ruffhead	1829R43, RR2489HS2, Outpost M18, St. Petersburg M6, St. Petersburg M7, In The Year Of The Dragon M4
Stephen Webb	
Tim Parkes	1835B44
Tony Sait	1829R43, 1830Y43, 1835B44, RR2489HS2, Outpost M18

WAITING	1829	David H [North], Mark H
	1830	Mike R, Mark H, John W
	1835	John W, David H
	1856	Ian P, John W, Tony S
	1861	John S
	1870	Mike B, John S
	18EU	John S, David H
	RAILWAY RIVALS	
	OUTPOST	Ian P, John W, Mike R, David H, Mick H
	ST. PETERSBURG	
	IN YEAR OF DRAGON	

DEADLINE: FRIDAY 15TH APRIL 2022

HOST : ROB THOMASSON

DIVISION OF A FOUR DIGIT KEYPAD SEQUENCE BY 11

Steve T

Those of us who are sufficiently old to remember the days before pocket calculators and who had any interest at all in recreational mathematics will recall the "standard" tests for divisibility by small numbers.[1] In particular, you can test for divisibility by 11 by adding up the digits in the odd places, adding up the digits in the even places, subtracting, repeat as necessary, and if the result is a multiple of 11, so was the original number. Why this works is associated with the fact that $99=9 \times 11$ is one less than 100; the process is in essence "casting out the 99s".

Let us apply this to a keypad. Start in any corner of our rectangle, and obtain digits by moving up y rows and across x columns. (x and y may be negative.) The digits are therefore n , $n+3y$, $n+3y+x$, and $n+x$. (Or possibly n , $n+x$, $n+3y+x$, and $n+3y$ if you start by moving across.) The sum of the odd digits is $n+3y + n+x = 2n + 3y + x$. The sum of the even digits is $n + n+3y+x = 2n + 3y + x$. The difference is zero, so the four-digit number in question is a multiple of 11.

QED

[1] Actually, there were several tests for divisibility by 7, and all of them were sufficiently complex that they seemed no easier than doing a trial division. In consequence I would now have to think Very Hard Indeed to bring any of them to mind.

Dane M

The test for divisibility of a number by 11 is to calculate the total of alternate digits, subtract the total of the other digits, and test the result for divisibility by 11.

On a 3x3 keypad any rectangular arrangement of four digits will give a number that produces the result 0 for the above test, so is divisible by 11.

The next step would be to dredge up from memory the proof that the above test works. Or to derive the proof from first principles, which might well be more likely to succeed...

I'll do it for a 4-digit number, but it can clearly be extended.

The number 'abcd' is equal to $10(10(10a+b)+c)+d$.

$$\begin{aligned} 10(10(10a+b)+c)+d &= (11-1)(10(10a+b)+c)+d \\ &= 11(10(10a+b)+c) - 10(10a+b) - c + d \\ &= 11(10(10a+b)+c) - (11-1)(10a+b) - c + d \\ &= 11(10(10a+b)+c) - 11(10a+b) + 10a + b - c + d \\ &= 11(10(10a+b)+c) - 11(10a+b) + (11-1)a + b - c + d \\ &= 11(10(10a+b)+c) - 11(10a+b) + 11a - a + b - c + d \end{aligned}$$

The first three terms are all divisible by 11, therefore for the number 'abcd' to be divisible by 11 $- a + b - c + d$ has to be divisible by 11.

Ian P

The initial part of the solution requires us to consider dividing a four digit integer ABCD by eleven. Since we are only interested in the remainder after dividing by eleven, we will consider each part of ABCD in turn.

Clearly when units are divided by eleven, the remainder is just the number (D in the supplied example). Considering tens next, the remainder is $10 * C$ which is more conveniently considered as minus C. In the case of hundreds, $B * 100 = B * 99 + B$. Dividing by eleven gives a remainder of B. In the case of thousands, $A * 1000 = A * 1001 - A$. Dividing by eleven gives a remainder of minus A. Dividing ABCD by eleven gives either $(- A + B - C + D)$ or $(11 - A + B - C + D)$ as a remainder. Rotating the numbers or reversing the numbers gives us the same possible pair of remainders.

The second part of the solution requires us to consider two rows of monotonically increasing integers. The first row consists of a set of $J+1$ integers starting at N and finishing at $N+J$ where N is at least zero and J is at least 1.

The second row consists of another set of $J+1$ integers starting at $N+K$ and finishing at $N+J+K$ where K is at least zero and $N+J+K$ is at most nine.

We now construct a four digit number from the four ends of the lists giving $A=N$, $B=N+J$, $C= N+J+K$ and $D=N+K$.

If we divide this ABCD number by eleven, the remainder is $- N + (N + J) - (N + J + K) + (N + K)$ which equals zero.

If we introduce T to represent ten, the calculation still works (apart from the obvious).

Dividends increase as we see what may have been the last train purchases of the game ... possibly ...

Operating Round 13

	Dir	Lay	[Rep]	Base	Run	Pay	Quote	Credit	Trains	Notes
CV	MB	24:M16:6	[8]		280	Y	150B	398	5	
CGR	IP	9:K14:2			280	Y	150B	147	5	A
BBG	IP	45:C16:3	[23]		570	N	100A	20	6 (5) +D	B D
TGB	JS	8:L9:2	[58]		320	N	100A	30	6 +5	C D
THB	MB	121:M4:2			580	Y	100A	30	D	
CPR	MH	15:N3:2	[57]		280	Y	90B	26	D	
WGB	DH	2:I14:2			160	Y	90B	16	D	

Operating Round 14

	Dir	Lay	[Rep]	Base	Run	Pay	Quote	Credit	Trains	Notes
CV	MB	8:L11:4			280	Y	175B	426	5	
CGR	IP	7:B21:2			280	Y	175B	147	5	
BBG	IP	8:B17:4			950	Y	110A	20	D 6	D
TGB	JS	8:M6:1	[58]		600	Y	110A	30	6 5	D
THB	MB				590	Y	110A	30	D	
CPR	MH				270	Y	100B	26	D	
WGB	DH	9:G16:2			320	Y	100B	48	D	

Notes A \$40 to Bank for a mountain or lake C \$550 to the Bank for a 5 Train
 B \$750+5 Train to the Bank for a Diesel D At Train Limit

Tiles

1/1	2/0	3/3	4/2	5/1	6/2	7/5	8/3	9/6	14/1	15/0	16/1
17/1	18/1	19/1	20/1	23/4	24/3	25/0	26/1	27/1	28/1	29/0	39/1
40/1	41/3	42/3	43/1	44/1	45/1	46/2	47/2	55/1	56/0	57/4	58/3
59/2	63/1	64/1	65/0	66/1	67/1	68/1	69/1	70/1	120/1	121/1	122/1
123/0	124/0	125/0	126/0	127/1							

Trains D/5(\$1,100)

Cash Flow	Start	OR13	OR14	End	Value	%	Certs	Max 11
Mike Bennett	427	544	550	1,521	3,756	25.4	11.0 - 11.0	
David Hooton	173	210	592	975	2,715	18.4	11.0 - 11.0	
Ian Pendlebury	178	168	737	1,083	3,593	24.3	11.0 - 11.0	
John Shelley	634	258	621	1,513	3,028	20.5	11.0 - 11.0	
Mark Hancock	128	196	285	609	1,669	11.3	7.0 - 7.0	

Portfolios	BBG	CPR	CV	TGB	THB	WGB	CGR
Mike Bennett	-	-	5P	-	6P	-	4
David Hooton	3	-	-	-	1	6P	4
Ian Pendlebury	6P	1	-	-	-	-	10P
John Shelley *	-	-	3	6P	3	-	-
Mark Hancock	1	6P	-	-	-	-	2
Bank New	-	3	1	4	-	3	-
Par	100	100	100	100	100	100	110
Bank Pool	-	-	1	-	-	1	-
Quote	110A	100B	175B	110A	110A	100B	175B
Credit	\$20	\$26	\$426	\$30	\$30	\$48	\$147
Tokens Left	-	3	1	-	-	-	1

Rights Held by ShareCos : BBG - Tunnel | THB - Bridge | CGR - Bridge, Tunnel.

The OR15 operating order is - CV, CGR, BBG, TGB, THB, CPR, WGB.

Routes and potential routes are protected with garrisons. The LBSC Receiver intends to lay connecting track on C6 and then E5. By the time of the next SDR the LBSC will be in status "rescue now or say goodbye".

Thinking of which ... let us have just OR16 next time and then OR17 & SDR11 the time after ...

Operating Round 14

	Dir	Lay	[Rep]	Token	Run	Pay	Quote	Credit	Trains	Notes
LNWR	DH	67:15:5	[14]	J5 - G4	230	Y	200	70	5	
GWR	JS	51:C7:1	[38]	D7 - F6	160	Y	112	110	4	
Mid	TS	38:J7:5	[13]	G8 - H8	160	Y	76	80	5	
LSWR	MR	51:M5:3	[38]	G6 - G8	170	Y	71	170	4 +4	A D
GNR	MR	38:K8:5	[10]	J9 - J6	220	Y	76	200	5 +7	B D
LBSC	BP	37:C8:3	[10]	D7 - D5	240	N	38	680		C
GER	MR	12:G10:3	[3]	F8 - G9	140	Y	61	110	4	
GCR	JS	67:E8:5	[14]	K6 - M7	220	N	56	330	5	

Operating Round 15

	Dir	Lay	[Rep]	Token	Run	Pay	Quote	Credit	Trains	Notes
LNWR	DH	50:H6:1	[34]	G4 - G6	260	Y	225	70	5	
GWR	JS	34:L5:3		F6 - D7	170	Y	126	110	4	
Mid	TS	8:H8:6		H8 - G9 !	180	Y	82	80	5	
LSWR	MR	3:G8:2		G8 - C10 =S	310	Y	76	70	4 4	E D
GNR	MR	14:M6:6	[1]	J6 - M5 =S	460	Y	82	100	7 5	E D
LBSC	BP	2:D5:4		D5 - C6	240	N	29	190	7	C F
GER	MR	67:C10:2	[14]	G9 - H9	140	Y	64	110	4	
GCR	JS	10:M7:1		M7 - M5 =S	250	Y	58	290	5	G

Notes	A	£270 to the GNR for a 4 Train	E	£100 to the Bank for a garrison
	B	£80 to the GER for a 7 Train	F	£720 to the Bank for a 7 Train
	C	Run by the receiver - train rented	G	£40 to the Bank for a garrison
	D	At Train Limit		

Tiles	1/2	2/1	3/1	4/5	5/4	6/4	7/2	8/2	9/8	10/2	12/2	13/3
	14/2	15/0	16/1	17/1	18/0	19/1	20/1	21/1	22/1	23/3	24/3	25/2
	26/1	27/2	28/0	29/1	30/1	31/1	32/0	33/0	34/0	35/1	36/1	37/0
	38/1	39/1	40/1	41/2	42/2	43/1	44/1	45/1	46/1	47/1	48/1	49/1
	50/1	51/0	60/2	67/1								

Trains 7/2(£720)

Cash Flow	Start	OR14	OR15	End	Value	%	Certs	Max 18
Mike Ruffhead	203	354	669	1,226	2,923	29.4	18 - 18	
John Shelley	28	170	379	577	2,197	22.1	17 - 17	
Tony Sait	19	217	264	500	1,895	19.0	11 - 11	
David Hooton	13	307	424	744	2,939	29.5	15 - 16	

Portfolios	Privates	LNWR	GWR	Mid	LSWR	GNR	LBSC	GER	GCR
Mike Ruffhead *	-	1	-	-	5D	8D	-	5D	2
John Shelley	-	-	7D	1	-	-	-	3	8D
Tony Sait	-	3	-	7D	-	1	-	1	-
David Hooton	-	6D	1	2	5	1	1	1	-
Bank New	Hull	-	-	-	-	-	-	-	-
Bank Pool	-	-	2	-	-	-	9R	-	-
Tokens Left		2	3	3	2	2	2	2	2

John funds two diesels and stays in the game ...

Operating Round 11

	Dir	Lay	[Rep]	Base	Run	Pay	Quote	Credit	Trains	Notes
C&O	MB	63:H4:1	[14]		180	N	120D	41	(4) +D	A B
NYNH	MB	61:E23:2	[53]		190	Y	126B	1	5	
B&O	TS	15:J14:5	[57]		260	Y	125C	75	6	
PRR	JS	63:H10:1	[14]				90E	1	[+D]	C D E
B&M	MB				180	Y	112A	1	5	
CPR	AM				80	Y	112A	60	5	
NYC	AM	14:F16:3	[57]		220	Y	100E	36	6	
Erie	JS	59:D10:4					63G	0	+D	F G

Operating Round 12

	Dir	Lay	[Rep]	Base	Run	Pay	Quote	Credit	Trains	Notes
NYNH	MB				190	Y	125C	20	5	
B&O	TS	61:I15:3	[53]		270	Y	120D	75	6	
C&O	MB				430	Y	130D	127	D	
B&M	MB				180	Y	82E	1	5	
CPR	AM				80	Y	126A	60	5	
NYC	AM				220	Y	100E	36	6	
PRR	JS						82E	0	+D	H I E
Erie	JS	68:D10:2	[59]		170	Y	67G	85	D	

- Notes**
- A \$800+4 Train to the Bank for a Diesel
 - B Diesel purchase starts Phase 6
 - C John S sold C&O/2(320), NYNH(142)
 - D \$533 from John S for a train purchase
 - E \$1,100 to the Bank for a D Train
 - F \$80 to Bank for a river
 - G \$1 to the PRR for a D Train
 - H John S sold NYNH(142), B&O(140), B&M/4(504), NYC(110)
 - I \$1,099 from John S for a train purchase

Tiles

1/1	2/0	3/2	4/2	7/4	8/5	9/2	14/1	15/0	16/1	18/1	19/1
20/1	23/1	24/3	25/1	26/1	27/1	28/1	29/1	39/1	40/1	41/2	42/2
43/2	44/1	45/2	46/1	47/1	53/2	54/1	55/1	56/0	57/4	58/1	59/2
61/0	62/0	63/0	64/1	65/0	66/1	67/0	68/0	69/0	70/1		

Trains D/3(\$1,100)

Cash Flow

	Start	OR11	OR12	End	Value	%	Certs	Max 16
Mike Bennett	83	244	459	786	2,778	34.5	15 - 15	
Andy Muir	58	277	280	615	2,456	30.5	14 - 14	
Tony Sait	62	219	371	652	2,236	27.7	13 - 13	
John Shelley	73	87	-29	131	593	7.4	4 - 4	

Portfolios

	PRR	NYC	CPR	B&O	C&O	Erie	NYNH	B&M
Mike Bennett *	-	1	-	-	5P	-	6P	6P
Andy Muir	-	6P	6P	3	-	-	1	-
Tony Sait	1	2	-	6P	3	1	1	-
John Shelley	4P	-	-	-	-	2P	-	-
Bank New	-	-	4	-	-	2	-	-
Par	82	82	100	100	76	100	100	100
Bank Pool	5	1	-	1	2	5	2	4
Quote	82E	100E	126A	120D	130D	67G	125C	82E
Credit	\$0	\$36	\$60	\$75	\$127	\$85	\$20	\$1
Tokens Left	-	1	3	2	-	1	-	1

The OR13 operating order is - C&O, CPR, NYNH, B&O, NYC, PRR, B&M, Erie.

OR6 only by advertised request. Commiseration/appreciation to those that had sent SR6 orders in advance of that advertisement.

Operating Round 6

	Dir	Lay	[Rep]	Base	Run	Pay	Quote	Credit	Trains	Notes
B-M	TP	207:13:6	[201]		70	H		74	2 +2+2	A E
B-P	JW	9:F20:1			80	H		10	2 +3	B E
Mag	GL	15:H16:1	[57]		130	H		149	2+2 2	E
K-M	TS				80	H		155	2 2	E
B-S	JS	87:B14:3	[4]		100	H		458	2+2 +3	B E
A-K	TP	12:A11:5	[6]		70	H		155	2	
ByE	JS	9:M13:2			180	Y	106F	37	2+2 2 2 2	C E
SxE	TP	18:H18:3	[7]	E19	220	Y	102D	94	3 3	D

Notes
 A 1M to the SxE for a 2+2 Train
 B 180M to the Bank for a 3 Train
 C 50M to Bank for a river
 D 60M to the Bank for a garrison
 E At Train Limit

Tiles

1/1	2/0	3/1	4/1	5/3	6/3	7/8	8/9	9/6	12/1	13/2	14/0
15/0	16/2	18/0	19/2	20/2	23/3	24/3	25/3	26/2	27/2	28/2	29/2
55/1	56/0	57/2	58/2	69/2	87/1	88/2	201/1	202/1	203/1	204/2	205/1
206/1	207/1	208/1	209/0	210/1	211/1	212/1	213/1	214/1	215/1		

Trains
 3+3/3(270M) then 4/3(360M) 4+4/1(440M) 5/2(500M) 5+5/1(600M) 6/2(600M)
 6+6/4(720M)

Cash Flow

	Start	OR6	End	Value	%	Certs	Max
John Shelley	154	165	319	1,199	25.0	7	12
Graham Lee	142	183	325	973	20.3	6	12
John Webley	162	94	256	744	15.5	4	12
Tony Sait	407	70	477	867	18.1	3	12
Tim Parkes	169	180	349	1,019	21.2	6	12

Portfolios

	Privates/Minors	PrE	ByE	SxE	BaE	WtE	HeE	MsE	OIE
John Shelley *	Ost, Pfa, B-S	-	50/4D	-	-	-	-	-	-
Graham Lee	Han, Mag	-	-	40/4	-	-	-	-	-
John Webley	B-P	-	30/3	-	-	-	-	-	-
Tony Sait	N-F, Bra, K-M	-	-	-	-	-	-	-	-
Tim Parkes	B-M, A-K	-	-	50/4D	-	-	-	-	-
Bank New	-	40/4D	-	10/1	100/8D	100/8D	100/8D	100/7D	100/7D
Bank Pool	-	-	20/2	-	-	-	-	-	-
Quote			106F	102D					
Credit			37M	94M					
Tokens Left		1	3	-	1	1	1	1	1

The OR7 operating order is - B-M, B-P, Mag, K-M, B-S, A-K, ByE, SxE - unless changed by SR6.

In response to a concerned enquiry - yes, MikeRail's HS run southwards from Crewe does terminate "in the middle of nowhere". Or rather it did - in this month's gripping episode the stub is developed.

Once again the runs were mostly tight or without competition. Longer routes compensated by using HS track. GITCO was the least fortunate company winning one of its entries despite never having a route more than one pip longer. GRAB soars out of debt and MikeRail invests in some HS line as mentioned above. All companies used all, or nearly all, of the available build allowance. For how long can that keep happening?

Runs

Company	Earn	Length	Choice(s)	L&M6	GRAB	MikeRail	GITCO
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7.4> 25-56 Grimsby - Bristol

L&M6	20	8 + 32				-4	
MikeRail	-	-		+4			

8.1> 13-S1 Huddersfield - South England [London | Bristol | Orange Half-Hex]

GRAB	20	0 + 36	London			-2	
MikeRail	10	7 + 31	Bristol		+2		
GITCO	0	14 + 30	London				

8.2> 14-52 Liverpool - Birmingham

GRAB	10	0 + 18				+1	
MikeRail	20	8 + 14			-1		

8.3> 21-65 York - London

GRAB	20	0 + 35					-4
GITCO	10	16 + 27			+4		

8.4> 26-S6 Doncaster - Any Seaport [Anchor Symbol]

L&M6	10	0 + 12	Hull				-6 +6
GITCO	20	0 + 12	Hull	-6 +6			

8.5> 32-64 Manchester Airport - London

GRAB	20	17 + 16					
MikeRail	10	4 + 33					

8.6> 34-41 Crewe - Lincoln

L&M6	10	8 + 20			-1	-2 +9	
GRAB	-	-		+1			
MikeRail	20	0 + 20		-9 +2			

8.7> 43-55 Nottingham - Newport

L&M6	20	8 + 17					
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Earnings + Payments + Receipts - L&M6 62, GRAB 66, MikeRail 58, GITCO 34

Builds			Cost
L&M6	Orange	(F9) - D10, (T25) - X23	-10 (Builds) -2/GRAB +1/MikeRail
GRAB	Green	(S10) - P8 - Sheffield	-8 (Builds) +2/L&M6
MikeRail	Red	(H15) - M18 - M19, (I25) - Worcester	-9 (Builds) -12/HS2 -1/L&M6
GITCO	Blue	(C6) - Wigan - F7 - G7 - Manchester - I8 - I10, (S33) - S34, (Q22) - Leicester	-10 (Builds)

Scores			Runs	7.4	8.1	8.2	8.3	8.4	8.5	8.6	8.7	Builds
L&M6	David Hooton	116 = 65	+16					+10		+16	+20	-11
GRAB	John Webley	58 = -2		+18	+11	+16			+20	+1		-6
MikeRail	Mike Ruffhead	106 = 70	+4	+12	+19				+10	+13		-22
GITCO	Tony Sait	102 = 78				+14	+20					-10

Runs for Round 9 - Enter up to 4

- 9.1> 11-22 Preston - Leeds
- 9.2> 15-66 Liverpool - London
- 9.3> 23-35 Leeds - Stoke
- 9.4> 31-54 Manchester - Gloucester
- 9.5> 44-55 Peterborough | Spalding - Wales [Newport | A12 - A30]
- 9.6> 45-62 Leicester - Oxford
- 9.7> 51-52 Birmingham - East Anglia [London | B60 - B65]

Building Allowances

The building allowance in round 9 will be 8 points (plus payments to rivals) and will decrease by 2 per round.

RAILWAY RIVALS RR2489HS2

NEXT - ROUND 9 RUNS THEN BUILDS UP TO 8 POINTS PLUS PAYMENTS TO RIVALS

There is nothing left on earth ...

Round 16 Actions

Mike Auctioned a Planetary Cruiser for 160. Mick joined at 193.
Mick got it for 193 (o:4,5 w:5,5,9 t:13,44,44 m:19 mo:45)

Mike Auctioned a Planetary Cruiser for 160. David joined at 161, Tony at 162, John at 163. John dropped out at 166, David at 170, Tony at 186.
Mike got it for 186 (o:3 w:30 t:9,44 r:13,15 n:14,18 ro:40)

Mick Passed

David Auctioned a Space Station for 120. Tony joined at 121, John at 122. John dropped out at 166, David at 170.
Tony got it for 170 (w:7,30 r:9,10,13,14,14,15,15 n:18 om:25)

David Auctioned a Laboratory for 98.
David got it for 98 reduced to 88 after Data Library discounts (n:88) plus a free Research Factory

David Bought one Population Unit (w:6)

David Bought two Robots (w:4,7 r:9)

Tony Passed

Dane Auctioned a Moon Base for 204 and got it for 204 (w:30,30 r:11,11,13,14,16,17 m:14,15,16,17)

John Bought one New Chemicals Factory (w:4 t:44 r:14)

John Bought one Research Factory (w:30)

Ian Auctioned a Moon Base for 200 and got it for 200 (o:2,5 w:30 t:44 m:18 n:18,22,26 om:35)

David Discarded w:6

Pos	Player	Factories	Operators (Limits)	Production	Total
1	Mike	2o,4w,6t,1n	13 (17) 0 (0)	1W,3t,1T,1r,1n,2ro	(217,25)
2	Mick	2o,3w,9t	14 (15) 0 (0)	3w,1t,2T,1m,1ro,1mo	(226,20)
3	Dane	2o,8w,7r	8 (9) 7 (8)	3w,1W,8r,4m,1mo	(273,10)
4	Ian	2o,4w,4t,2n	8 (10) 6 (8)	2o,1W,1T,4r,1m,3n,1om,1mo	(289,15)
5	David	2o,5w,1r,4n	6 (6) 5 (12)	1W,3r,1N,2ro	(237,10)
6	Tony	2o,5w,4r,1n	8 (10) 4 (8)	1o,1w,1W,7r,1n,2om	(211,15)
7	John	2o,6w,4t,2r,1n	15 (18) 0 (0)	5o,5w,1W,2T,2r,1n	(214,25)

Pos	Player	Colony Cards	VPs	Purchases
1	Mike	WH, HE, Sci, Eco, OP, OP, PC, PC	68	(645)
2	Mick	WH, HE, Nod, OL, OP, PC, MB	68	(590)
3	Dane	Nod, OL, OL, OL, Rob, Lab, Eco, MB	65	(535)
4	Ian	WH, HE, Nod, Sci, OL, Rob, SS, MB	62	(540)
5	David	DL, HE, Sci, Rob, Rob, Lab, Eco, Eco, PC	59	(485)
6	Tony	DL, DL, DL, DL, WH, Nod, Sci, Sci, Rob, Lab, SS, SS	55	(560)
7	John	WH, HE, Nod, Lab, Eco, OP, OP	47	(390)

On Offer Laboratory 1 (none left) Planetary Cruiser 1 (none left)
Space Station 2 (none left) Moon Base 2 (none left)

Sold out - Data Library, Warehouse, Heavy Equipment, Nodule, Scientists, Orbital Lab, Robots, Ecoplants, Outpost

A brace of Secretaries are observed ... and then a triptych of top-drawer Aristocrats become available ...

Buildings Actions

Mick Haytack	Mike Ruffhead	Brad Martin	John Webley
Buy Observatory [6]	Buy Hospital [13]	Buy Customs House [6]	Buy Academy [22]
Buy Firehouse [10]	Upgrade Hospital to Catherine The Great Palace from Hand [3]	~	~
Observe Aristocrats Buy Secretary [12]	Upgrade Author to Minister Of Foreign Affairs from Hand [16]	~	~
~	Observe Aristocrats Take Secretary into Hand		

The Cards for Next Time

Top Row | Bottom Row



Cards Bought

* indicates a Trading (Upgrade) Card

Brad M	Gold Miner [4-3-0] by 2, Shepherd [5-3-0], Carpenter Workshop* [4-3&-1/B-0], Fur Shop* [10-3-2], Market [5-0-1] by 2, Customs House [8-0-2] by 2, Pub [1-0-2 for 1], Author [4-1-0], Administrator [7-2-0], Mistress Of Ceremonies [18-6-3]
John W	Lumberjack [3-3-0] by 2, Fur Trapper [6-3-0], Weaving Mill* [8-6-0], Fur Shop* [10-3-2], Wharf* [12-6-1], Market [5-0-1] by 2, Warehouse [2-0-0], Academy [23-0-7], Author [4-1-0], Warehouse Manager [10-3-0] by 2
Mick H	Gold Miner [4-3-0] by 3, Ship Builder [7-3-0] by 2, Weaving Mill* [8-6-0], Observatory [6-0-1?], Customs House [8-0-2] by 2, Firehouse [11-0-3] by 2, Pub [1-0-2 for 1], Bank* [13-5-1], Author [4-1-0], Warehouse Manager [10-3-0], Secretary [12-4-0] by 2, Controller [14-4-1]
Mike R	Lumberjack [3-3-0] by 3, Gold Miner [4-3-0], Shepherd [5-3-0], Fur Trapper [6-3-0] by 2, Wharf* [12-6-1], Observatory [6-0-1?], Smolny Cathedral* [17-4-3], Catherine The Great Palace* [17-1-5], Author [4-1-0], Administrator [7-2-0], Controller [14-4-1], Judge [16-5-2], Minister Of Foreign Affairs* [20-2-4]

Cards In Hand

* indicates a Trading (Upgrade) Card

Brad M	Senator* [12-2-2]
John W	Ship Builder [7-3-0]
Mick H	Admiral* [18-3-3], Czar* [24-0-6]
Mike R	Warehouse Manager [10-3-0], Secretary [12-4-0]

Summary

Player	Hand Cap	Rubles	VPs	Income per Phase - Rubles + VPs			Round 5 Start [Cards Left]
				Workers	Buildings	Aristocrats	
Brad M	3	11	32	15r + 2v	0r + 6v	9r + 3v	Aristocrats [4]
John W	4	5	21	24r + 3v	0r + 9v	7r + 0v	Trading [16]
Mick H	3	12	21	21r + 0v	5r + 11/12v	16r + 1v	Buildings [1]
Mike R	3	5	27	27r + 1v	4r + 12/13v	14r + 7v	Workers [2]

It turns out that David Hooton did not ask to be a part of this game. Who knows where I got that from. Happily Mick Haytack has stepped in to the opportunity (thank you) and we get started with both Workers and Buildings.

In a change from tradition I will keep the columns of the actions tables the same for every round - rather than changing it each so that the first to act is in the leftmost column. Also, in a change from some tradition, we have two players that did not always buy the cheapest available worker.

Workers Actions

Mike Ruffhead	Mick Haytack	John Webley	Brad Martin
		Buy Lumberjack [3]	Buy Gold Miner [4]
Buy Gold Miner [4]	Buy Gold Miner [4]	Buy Shepherd [5]	~
Buy Czar & Carpenter [8]	Buy Fur Trapper [6]	Buy Fur Trapper [6]	

Buildings Actions

Mike Ruffhead	Mick Haytack	John Webley	Brad Martin
	Buy Pub [1]	~	Buy Theater [20]
Take Market into Hand			

The Cards for Next Time

Top Row | Bottom Row



Cards Bought

* indicates a Trading (Upgrade) Card

Mike R	Gold Miner [4-3-0], Czar & Carpenter [8-3-0]
Mick H	Gold Miner [4-3-0], Fur Trapper [6-3-0], Pub [1-0-2 for 1]
John W	Lumberjack [3-3-0], Shepherd [5-3-0], Fur Trapper [6-3-0]
Brad M	Gold Miner [4-3-0], Theater [20-0-6],

Cards In Hand

* indicates a Trading (Upgrade) Card

Brad M	
Mick H	
John W	
Mike R	Market [5-0-1]

Summary

Player	Hand Cap	Rubles	VPs	Income per Phase - Rubles + VPs			Round 1 Start [Cards Left]
				Workers	Buildings	Aristocrats	
Mike R	3	19	0	6r + 0v	0r + 0v	0r + 0v	Trading [30]
Mick H	3	20	0	6r + 0v	0r + 0v	0r + 0v	Buildings [28]
John W	3	20	0	9r + 0v	0r + 0v	0r + 0v	Workers [23]
Brad M	3	4	6	3r + 0v	0r + 6v	0r + 0v	Aristocrats [27]