Timetabling Solutions

Version 10

Timetable Development

Lesson 11: Enter Timetable Constraints

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PROFESSIONAL LEARNING OBJECTIVES

- Set up timetable constraints to restrict allocations for teachers, classes, or meetings

SKILLS

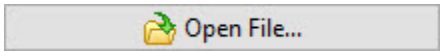
- Understand the features of the class allocations screen
- Enter full day not at school constraints for part time teachers
- Enter unavailable constraints for meetings
- Enter groups unavailable information
- Allocate ‘must’ groups on the timetable
- Enter teacher unavailable information for specific periods in the timetable cycle

DEFINE TIMETABLE CONSTRAINTS

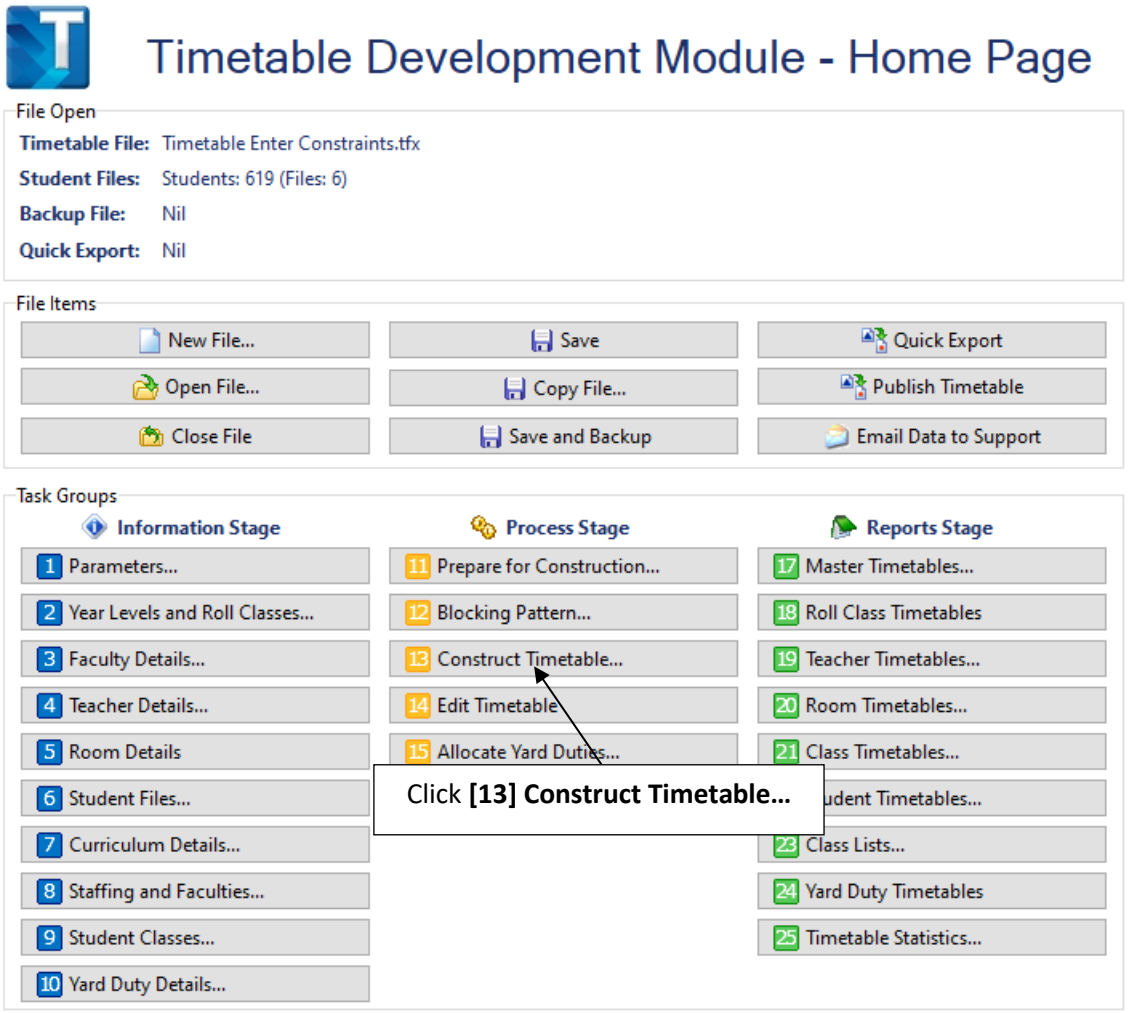
Timetable constraints have a significant role in the timetable construction process. These can include, but are not limited to, the availability of part time staff, scheduling of meetings and when classes can or cannot be scheduled. Any constraints that must happen need to be entered into the program before timetable construction.

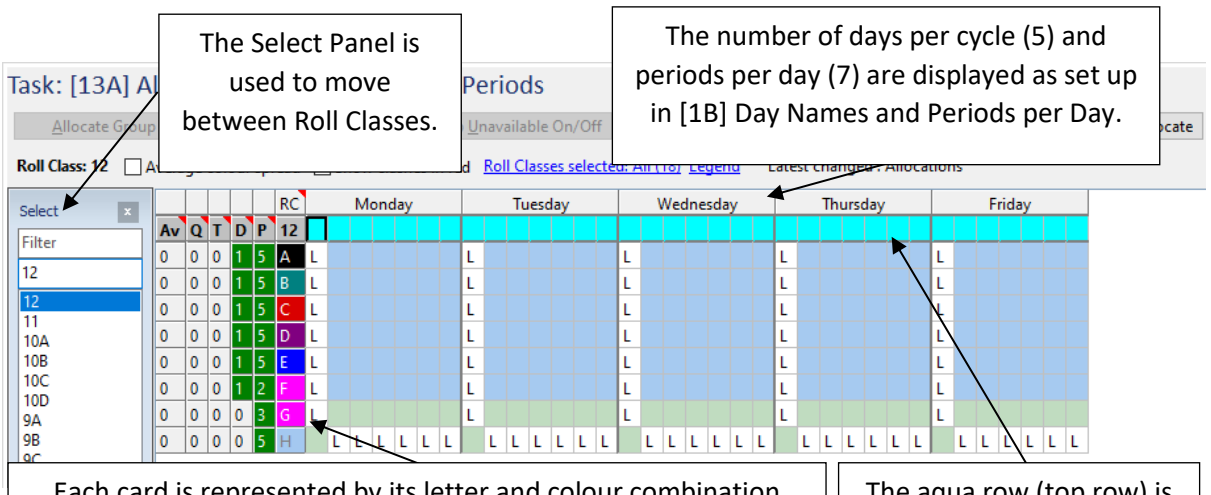
ROLL CLASS ALLOCATIONS SCREEN

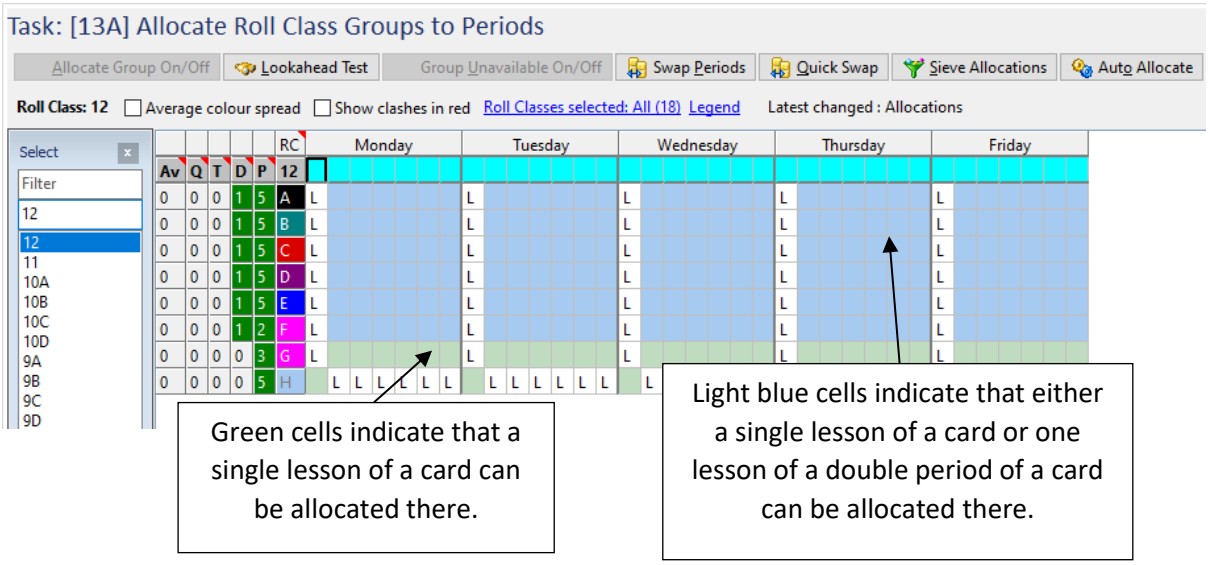
The [13A] Roll Class Allocations screen is used to construct the timetable. It is used to allocate cards to periods, where the cards can be either a single class or a group of classes. It also displays clash information if a card cannot be allocated to a particular period.

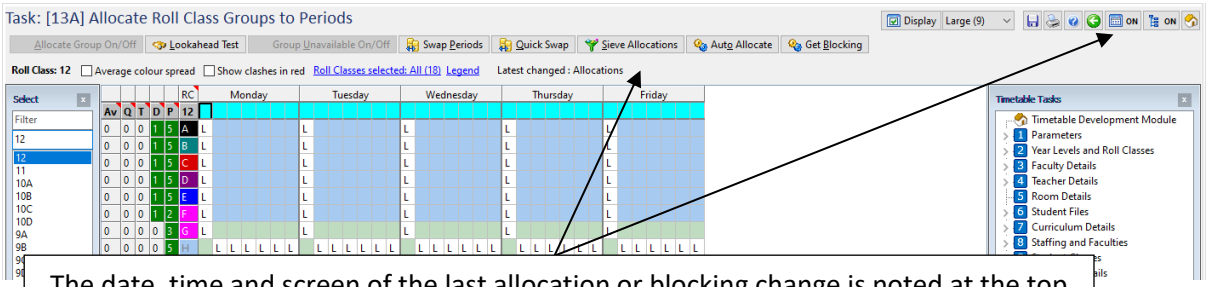


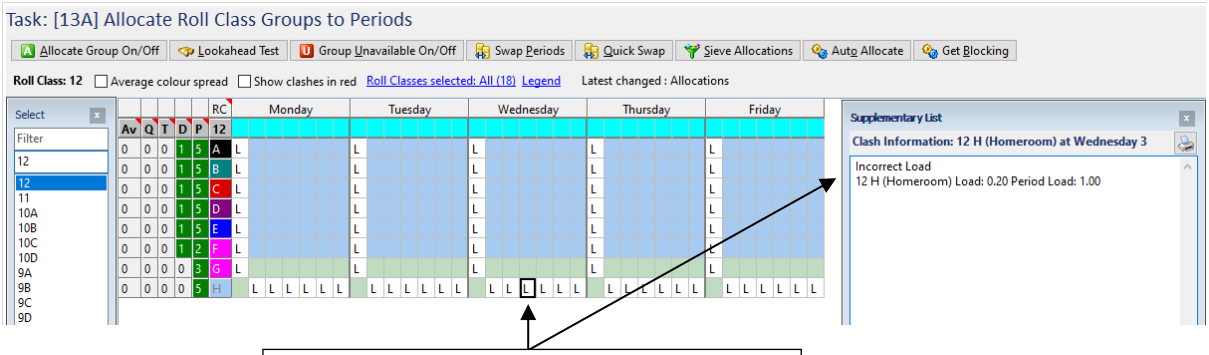
Open the file: C:\Users\Public\Documents\V10 Training Data\Timetable Enter Constraints.tfx




The Select Panel is used to move between Roll Classes.
The number of days per cycle (5) and periods per day (7) are displayed as set up in [1B] Day Names and Periods per Day.
Monday
Tuesday
Wednesday
Thursday
Friday
Each card is represented by its letter and colour combination which was set up in [7A] Class Information.
The number of periods, doubles, triples, quadruples and average allocation spread are displayed to the left of each letter.
The aqua row (top row) is the work line which will display allocated cards.


Task: [13A] Allocate Roll Class Groups to Periods
Green cells indicate that a single lesson of a card can be allocated there.
Light blue cells indicate that either a single lesson of a card or one lesson of a double period of a card can be allocated there.


Task: [13A] Allocate Roll Class Groups to Periods
The date, time and screen of the last allocation or blocking change is noted at the top of the screen. The screen captures used in this book do not display this information.
Click OFF to display the Supplementary List if required



Click a cell with an "L" and the reason why the card cannot be placed there is displayed in the Supplementary List

ENTER PART TIME TEACHER CONSTRAINTS

Part time teachers can have a significant impact on the construction of a timetable. The amount of time off required by each teacher varies depending on their load and other considerations.

Part time teachers could require:

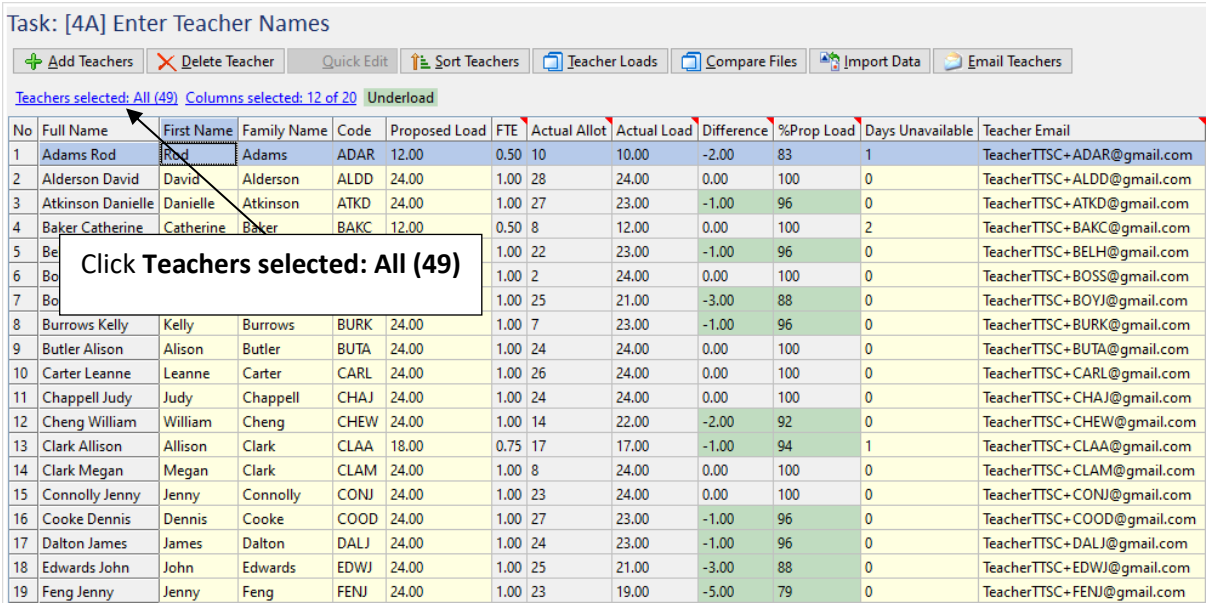
- Floating days off: The number of days off are set, but the specific days off are determined during the timetabling process.
- Set days off: Specific days off are required and are set prior to timetable construction.

ENTER DAYS UNAVAILABLE FOR ALL PART TIME TEACHERS

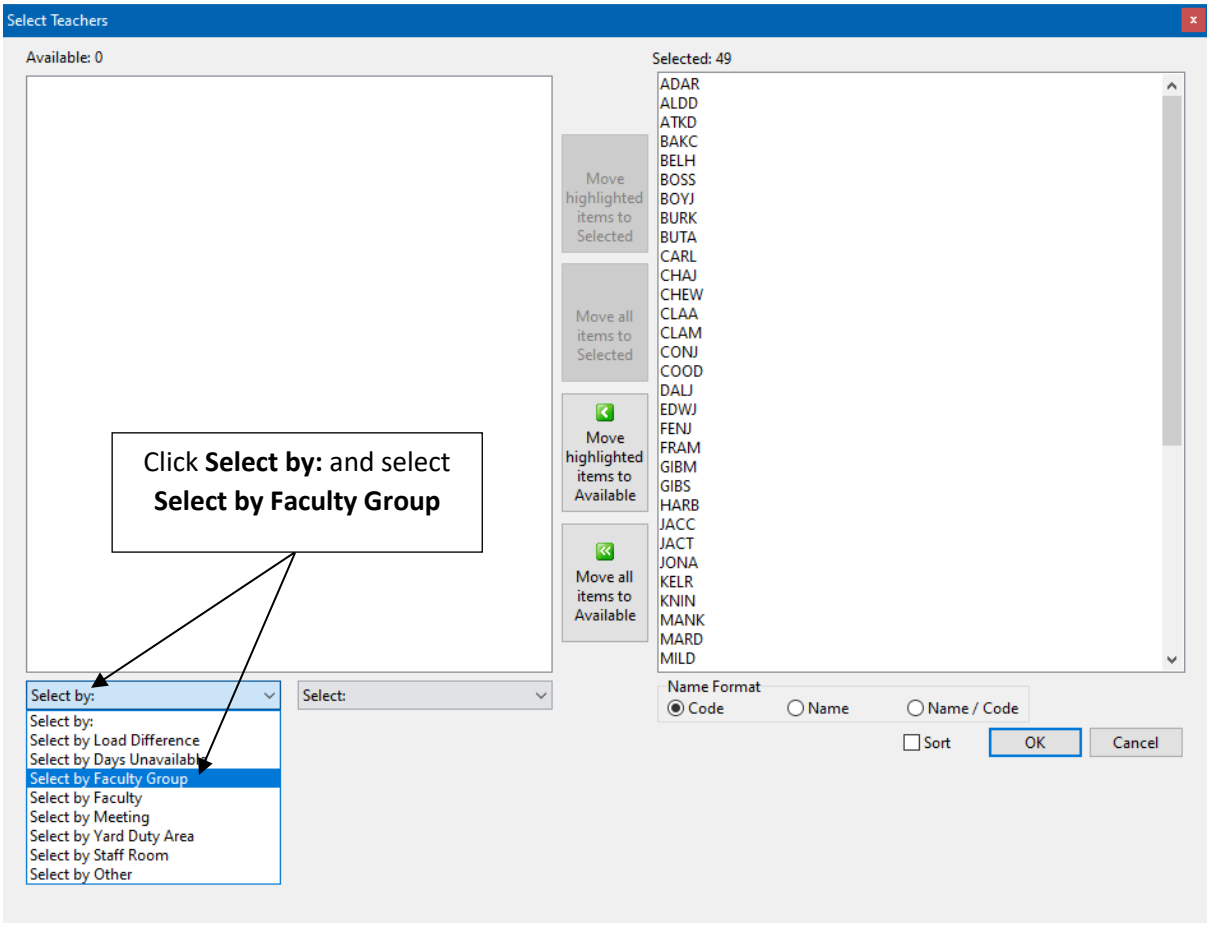
The number of days unavailable for all part time teachers needs to be entered in [4A] Teacher Names before timetable construction commences.

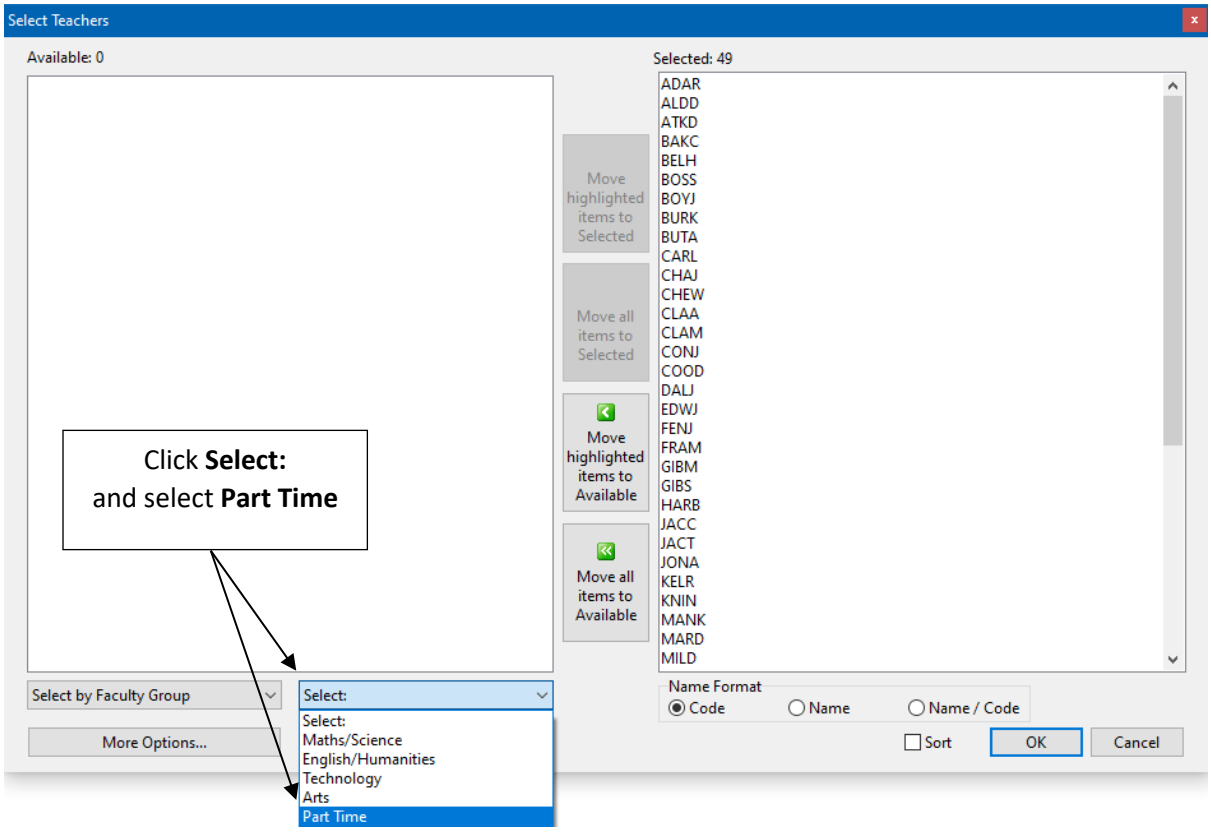
In this example, separate faculties were set up for the part time teachers requiring days off and for the part time teachers not requiring days off. A part time faculty group which contains all part time teachers was also created.

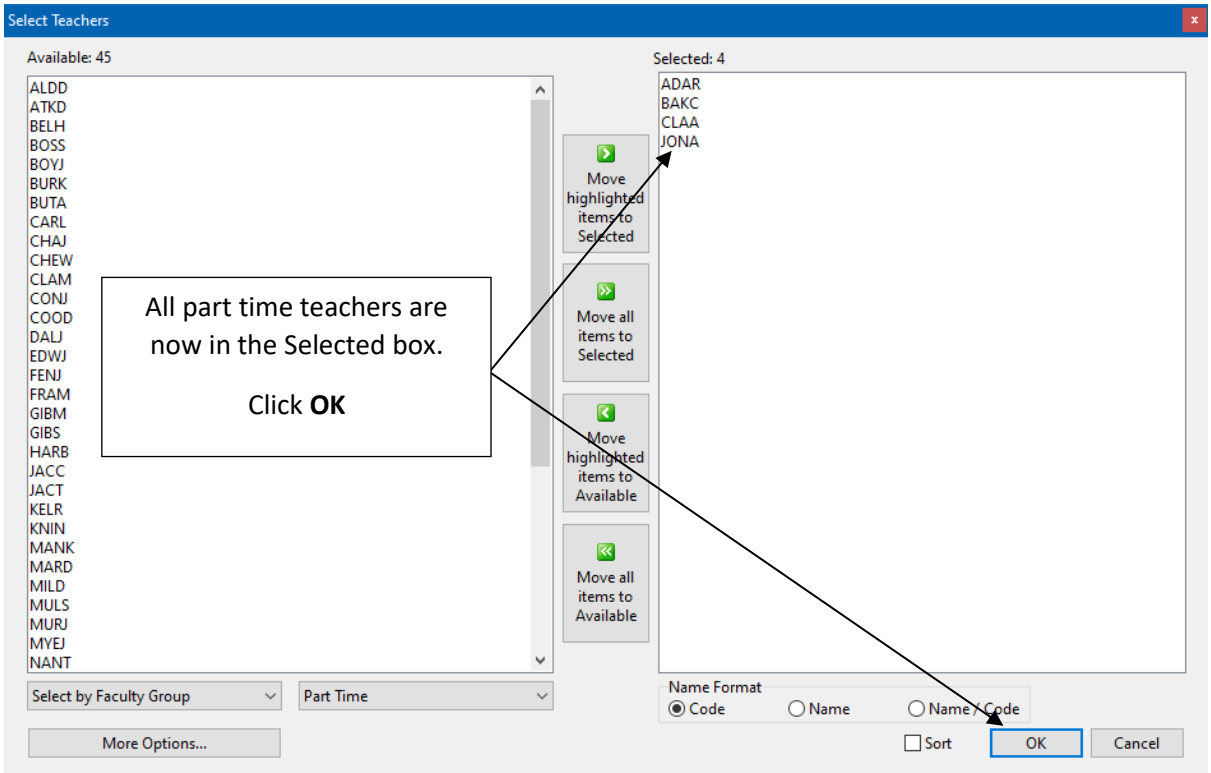
On the Task Tree select:
[4A] Teacher Names

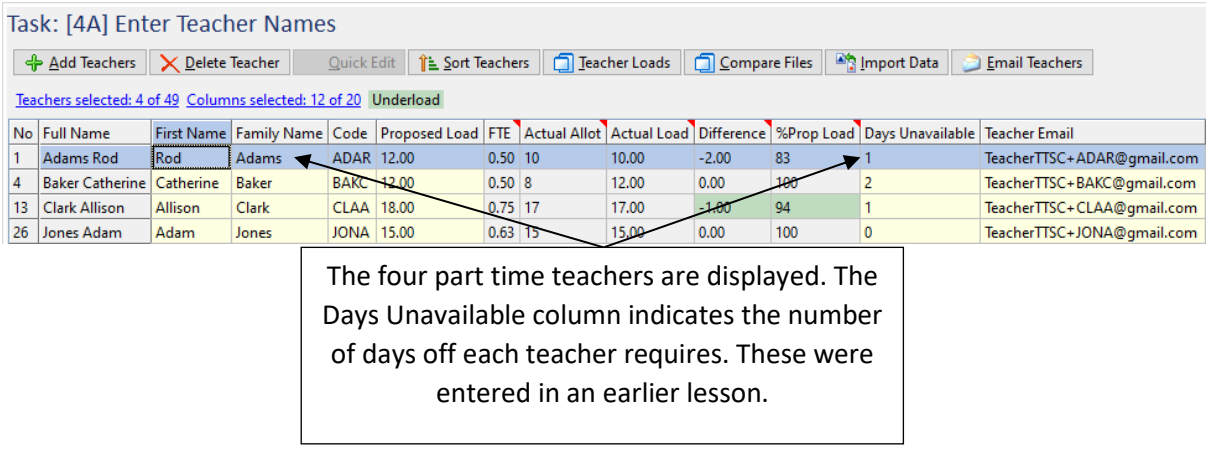


No	Full Name	First Name	Family Name	Code	Proposed Load	FTE	Actual Allot	Actual Load	Difference	%Prop Load	Days Unavailable	Teacher Email
1	Adams Rod	Rod	Adams	ADAR	12.00	0.50	10	10.00	-2.00	83	1	TeacherTTSC+ADAR@gmail.com
2	Alderson David	David	Alderson	ALDD	24.00	1.00	28	24.00	0.00	100	0	TeacherTTSC+ALDD@gmail.com
3	Atkinson Danielle	Danielle	Atkinson	ATKD	24.00	1.00	27	23.00	-1.00	96	0	TeacherTTSC+ATKD@gmail.com
4	Baker Catherine	Catherine	Baker	BAKC	12.00	0.50	8	12.00	0.00	100	2	TeacherTTSC+BAKC@gmail.com
5	Be					1.00	22	23.00	-1.00	96	0	TeacherTTSC+BELH@gmail.com
6	Bo					1.00	2	24.00	0.00	100	0	TeacherTTSC+BOSS@gmail.com
7	Bo					1.00	25	21.00	-3.00	88	0	TeacherTTSC+BOYJ@gmail.com
8	Burrows Kelly	Kelly	Burrows	BURK	24.00	1.00	7	23.00	-1.00	96	0	TeacherTTSC+BURK@gmail.com
9	Butler Alison	Alison	Butler	BUTA	24.00	1.00	24	24.00	0.00	100	0	TeacherTTSC+BUTA@gmail.com
10	Carter Leanne	Leanne	Carter	CARL	24.00	1.00	26	24.00	0.00	100	0	TeacherTTSC+CARL@gmail.com
11	Chappell Judy	Judy	Chappell	CHAJ	24.00	1.00	24	24.00	0.00	100	0	TeacherTTSC+CHAJ@gmail.com
12	Cheng William	William	Cheng	CHEW	24.00	1.00	14	22.00	-2.00	92	0	TeacherTTSC+CHEW@gmail.com
13	Clark Allison	Allison	Clark	CLAA	18.00	0.75	17	17.00	-1.00	94	1	TeacherTTSC+CLAA@gmail.com
14	Clark Megan	Megan	Clark	CLAM	24.00	1.00	8	24.00	0.00	100	0	TeacherTTSC+CLAM@gmail.com
15	Connolly Jenny	Jenny	Connolly	CONJ	24.00	1.00	23	24.00	0.00	100	0	TeacherTTSC+CONJ@gmail.com
16	Cooke Dennis	Dennis	Cooke	COOD	24.00	1.00	27	23.00	-1.00	96	0	TeacherTTSC+COOD@gmail.com
17	Dalton James	James	Dalton	DALJ	24.00	1.00	24	23.00	-1.00	96	0	TeacherTTSC+DALJ@gmail.com
18	Edwards John	John	Edwards	EDWJ	24.00	1.00	25	21.00	-3.00	88	0	TeacherTTSC+EDWJ@gmail.com
19	Feng Jenny	Jenny	Feng	FENJ	24.00	1.00	23	19.00	-5.00	79	0	TeacherTTSC+FENJ@gmail.com




Select Teachers
Available: 0
Selected: 49
ADAR
ALDD
ATKD
BAKC
BELH
BOSS
BOYJ
BURK
BUTA
CARL
CHAJ
CHEW
CLAA
CLAM
CONJ
COOD
DALJ
EDWJ
FENJ
FRAM
GIBM
GIBS
HARB
JACC
JACT
JONA
KELR
KNIN
MANK
MARD
MILD
Move highlighted items to Selected
Move all items to Selected
Move highlighted items to Available
Move all items to Available
Click Select:
and select Part Time
Select by Faculty Group
Select:
Select:
Maths/Science
English/Humanities
Technology
Arts
Part Time
More Options...
Name Format
Code
Name
Name / Code
Sort
OK
Cancel


Select Teachers
Available: 45
Selected: 4
ADAR
BAKC
CLAA
JONA
ALDD
ATKD
BELH
BOSS
BOYJ
BURK
BUTA
CARL
CHAJ
CHEW
CLAM
CONJ
COOD
DALJ
EDWJ
FENJ
FRAM
GIBM
GIBS
HARB
JACC
JACT
KELR
KNIN
MANK
MARD
MILD
MULS
MURJ
MYEJ
NANT
Move highlighted items to Selected
Move all items to Selected
Move highlighted items to Available
Move all items to Available
All part time teachers are now in the Selected box.
Click OK
Select by Faculty Group
Part Time
More Options...
Name Format
Code
Name
Name / Code
Sort
OK
Cancel



In this example, the part time teachers' requirements are:

Teacher	Code	Set Days Off	Number of Days Off	Required Days Off
Rod Adams	ADAR	No	1	
Catherine Baker	BAKC	Yes	2	Monday, Tuesday
Alison Clark	CLAA	Yes	1	Monday
Adam Jones	JONA	No	0	

Note: As Rod Adams (ADAR) does not require a set day off, a decision will be made during timetable construction as to the appropriate time to allocate their one day off.

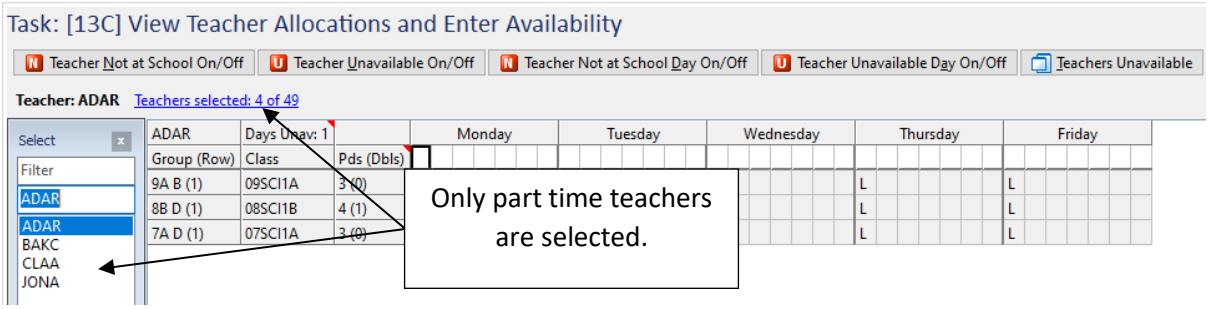
TEACHER ALLOCATIONS SCREEN

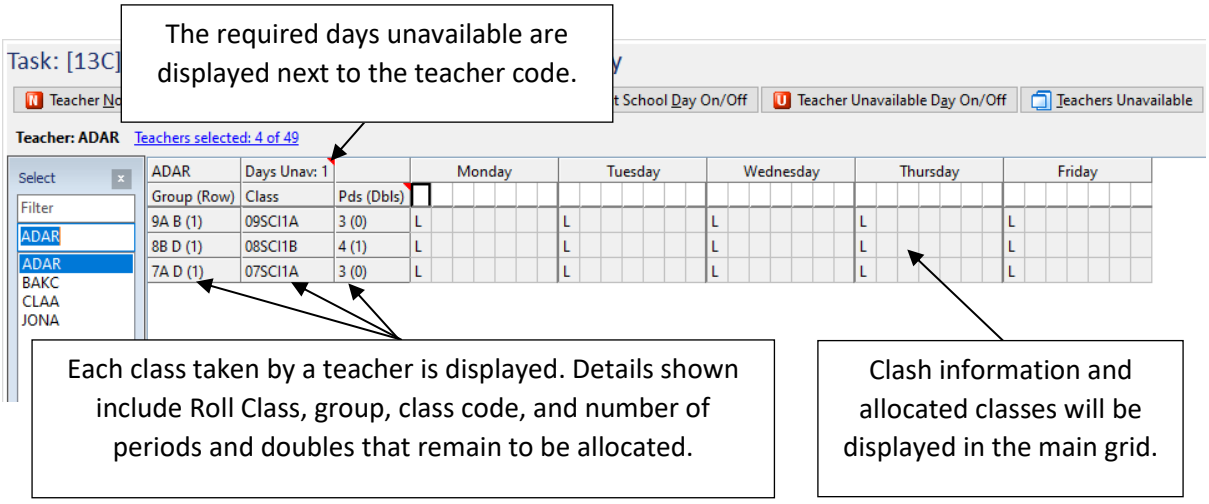
Teacher Allocations displays details of all classes a teacher has been allocated to. It can also be used to enter teacher availability.

Teachers can be made unavailable or not at school for individual periods or whole days using the following criteria in the program:

- **Unavailable (U)** – Generally used for individual periods or groups of periods where the teacher is at school but not available to teach.
- **Not At School (N)** – Generally used for teachers who are not on the school premises for specific periods or days.

On the Task Tree select:
[13C] Teacher Allocations



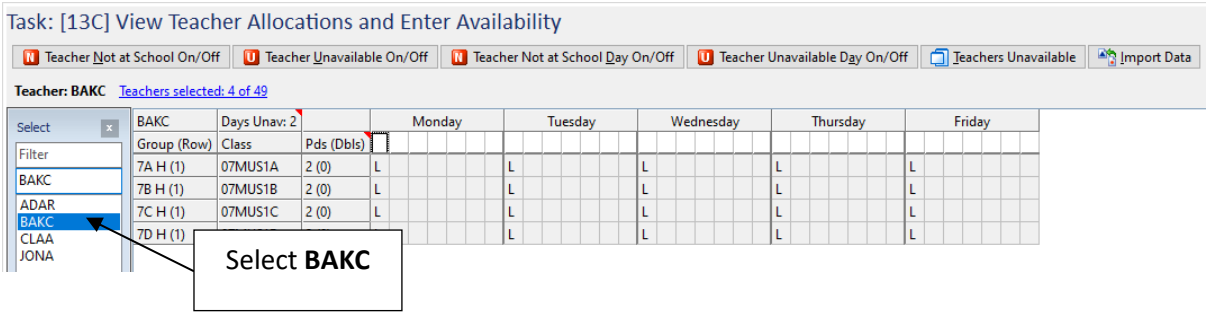


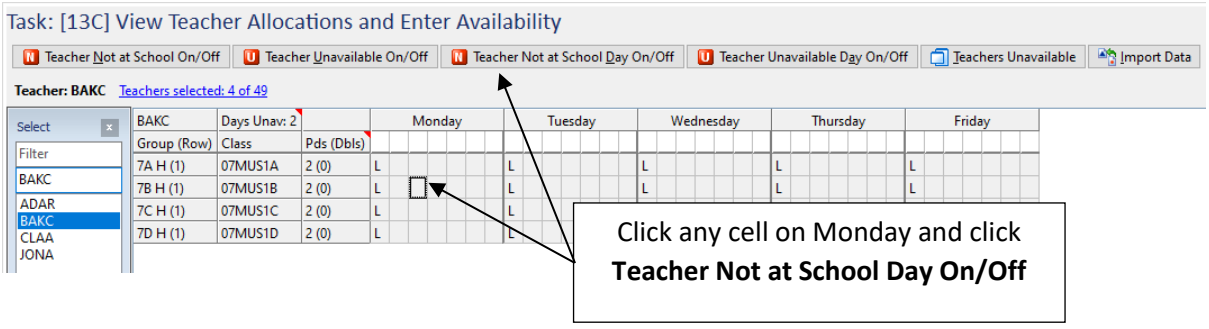
PART TIME TEACHERS - SET DAYS OFF

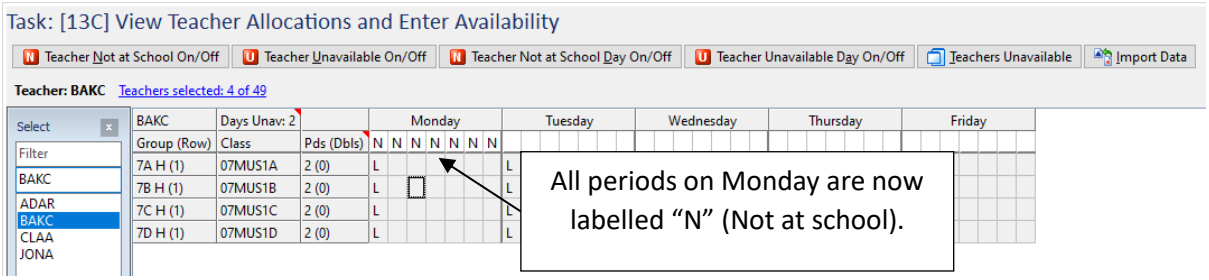
If a teacher requires set days or periods off this is entered on Teacher Allocations.

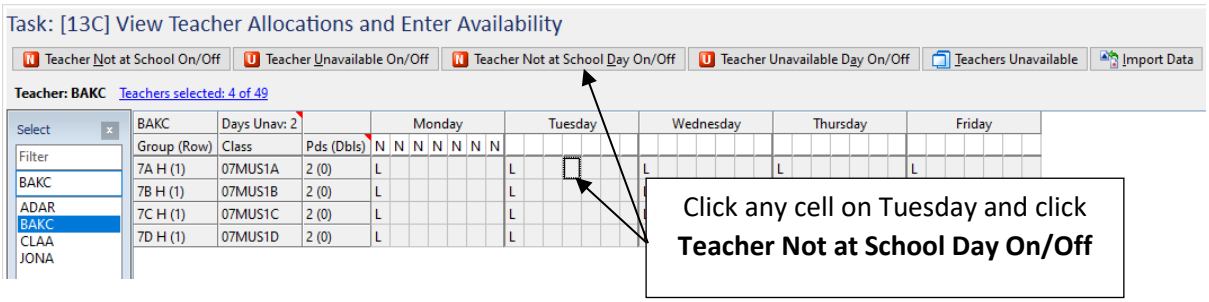
In this example, the following teachers require set days off:

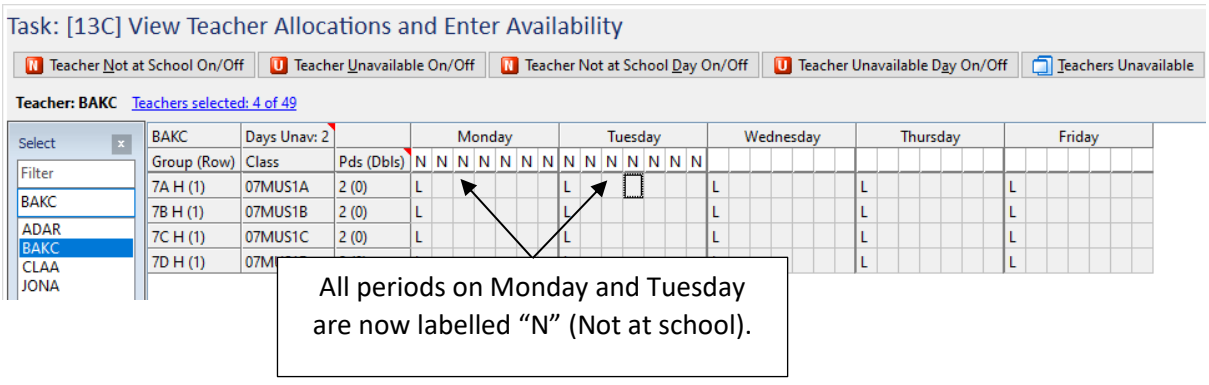
- Catherine Baker (BAKC) – FTE 0.50, Proposed Load 12.00, must have Monday and Tuesday off
- Alison Clark (CLAA) – FTE 0.75, Proposed Load 18.00, must have Monday off

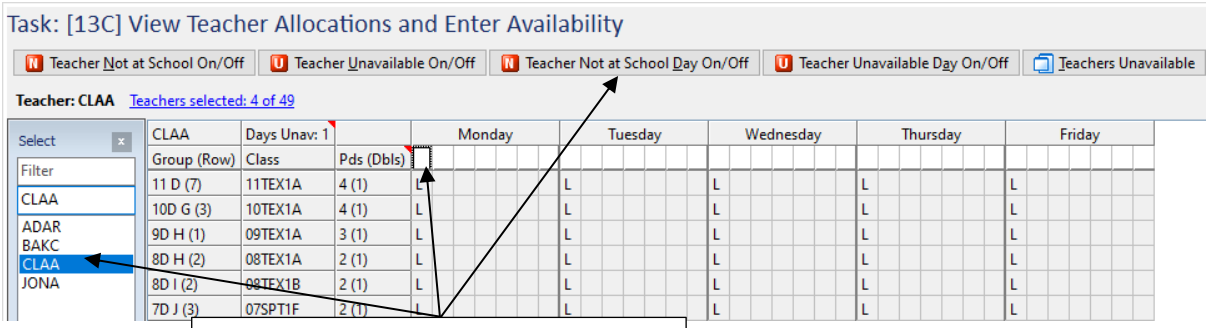



Task: [13C] View Teacher Allocations and Enter Availability
Teacher Not at School On/Off
Teacher Unavailable On/Off
Teacher Not at School Day On/Off
Teacher Unavailable Day On/Off
Teachers Unavailable
Import Data
Teacher: BAKC
Teachers selected: 4 of 49
Select
Filter
BAKC
ADAR
BAKC
CLAA
JONA
BAKC
Days Unav: 2
Group (Row)
Class
Pds (Dbls)
Monday
Tuesday
Wednesday
Thursday
Friday
7A H (1)
07MUS1A
2 (0)
7B H (1)
07MUS1B
2 (0)
7C H (1)
07MUS1C
2 (0)
7D H (1)
07MUS1D
2 (0)
Click any cell on Monday and click
Teacher Not at School Day On/Off


Task: [13C] View Teacher Allocations and Enter Availability
Teacher Not at School On/Off
Teacher Unavailable On/Off
Teacher Not at School Day On/Off
Teacher Unavailable Day On/Off
Teachers Unavailable
Import Data
Teacher: BAKC
Teachers selected: 4 of 49
Select
Filter
BAKC
ADAR
BAKC
CLAA
JONA
BAKC
Days Unav: 2
Group (Row)
Class
Pds (Dbls)
Monday
Tuesday
Wednesday
Thursday
Friday
7A H (1)
07MUS1A
2 (0)
7B H (1)
07MUS1B
2 (0)
7C H (1)
07MUS1C
2 (0)
7D H (1)
07MUS1D
2 (0)
All periods on Monday are now
labelled “N” (Not at school).

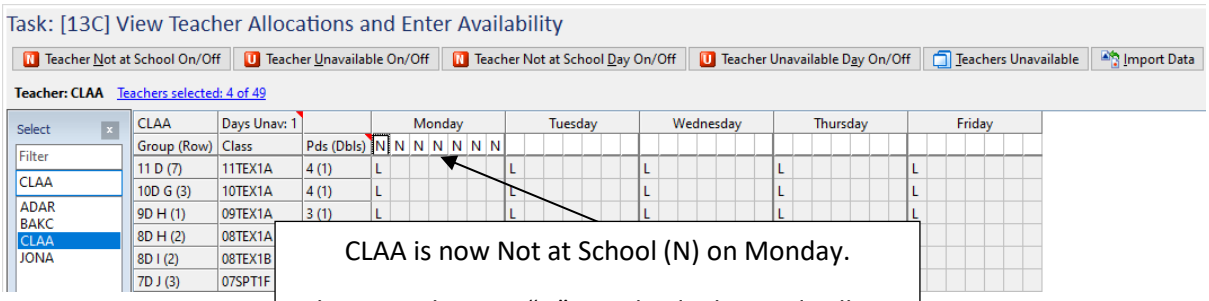

Task: [13C] View Teacher Allocations and Enter Availability
Teacher Not at School On/Off
Teacher Unavailable On/Off
Teacher Not at School Day On/Off
Teacher Unavailable Day On/Off
Teachers Unavailable
Import Data
Teacher: BAKC
Teachers selected: 4 of 49
Select
Filter
BAKC
ADAR
BAKC
CLAA
JONA
BAKC
Days Unav: 2
Group (Row)
Class
Pds (Dbls)
Monday
Tuesday
Wednesday
Thursday
Friday
7A H (1)
07MUS1A
2 (0)
7B H (1)
07MUS1B
2 (0)
7C H (1)
07MUS1C
2 (0)
7D H (1)
07MUS1D
2 (0)
Click any cell on Tuesday and click
Teacher Not at School Day On/Off


Task: [13C] View Teacher Allocations and Enter Availability
Teacher Not at School On/Off
Teacher Unavailable On/Off
Teacher Not at School Day On/Off
Teacher Unavailable Day On/Off
Teachers Unavailable
Teacher: BAKC
Teachers selected: 4 of 49
Select
Filter
BAKC
ADAR
BAKC
CLAA
JONA
BAKC
Days Unav: 2
Group (Row)
Class
Pds (Dbls)
Monday
Tuesday
Wednesday
Thursday
Friday
7A H (1)
07MUS1A
2 (0)
7B H (1)
07MUS1B
2 (0)
7C H (1)
07MUS1C
2 (0)
All periods on Monday and Tuesday
are now labelled “N” (Not at school).



Select **CLAA**

Click any cell on Monday and click **Teacher Not at School Day On/Off**

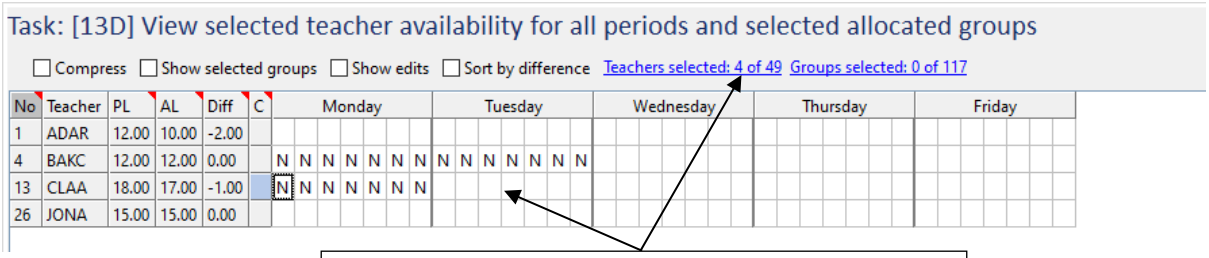


CLAA is now Not at School (N) on Monday.

Alternatively, type “N” in individual period cells to make the teacher not at school for that period.

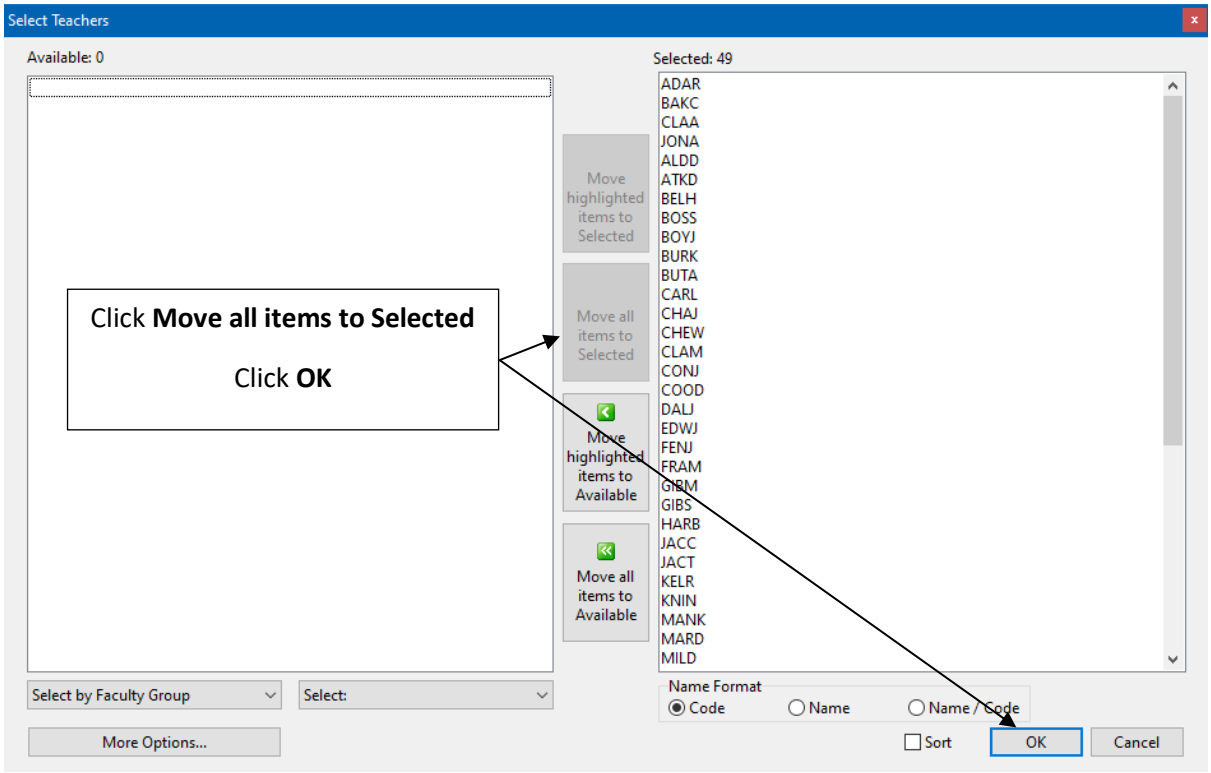
Click **Save**

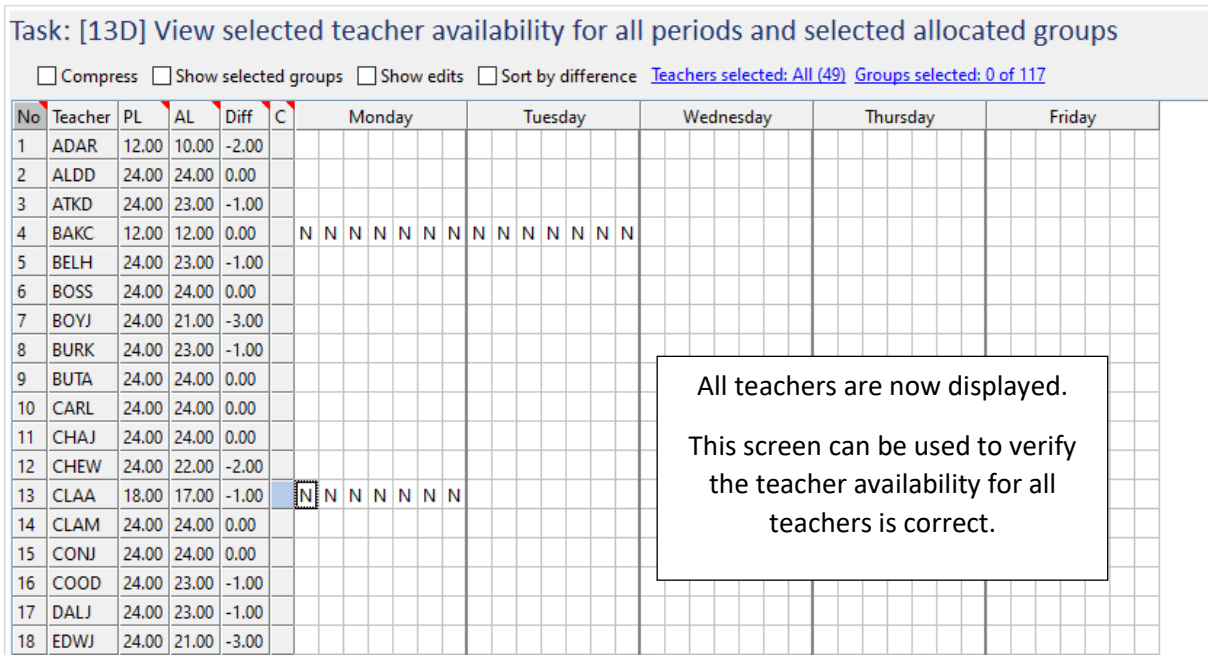
On the Task Tree select:
[13D] Teacher On/Off List



At this stage, the Teacher On/Off List displays all availability information for selected teachers.

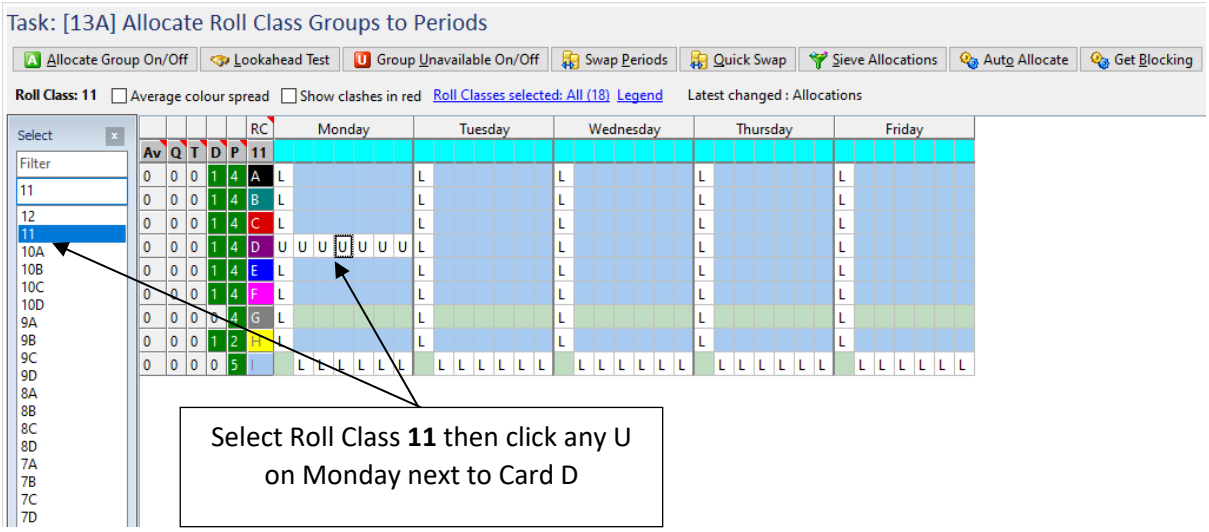
Click **Teachers selected: 4 of 49**

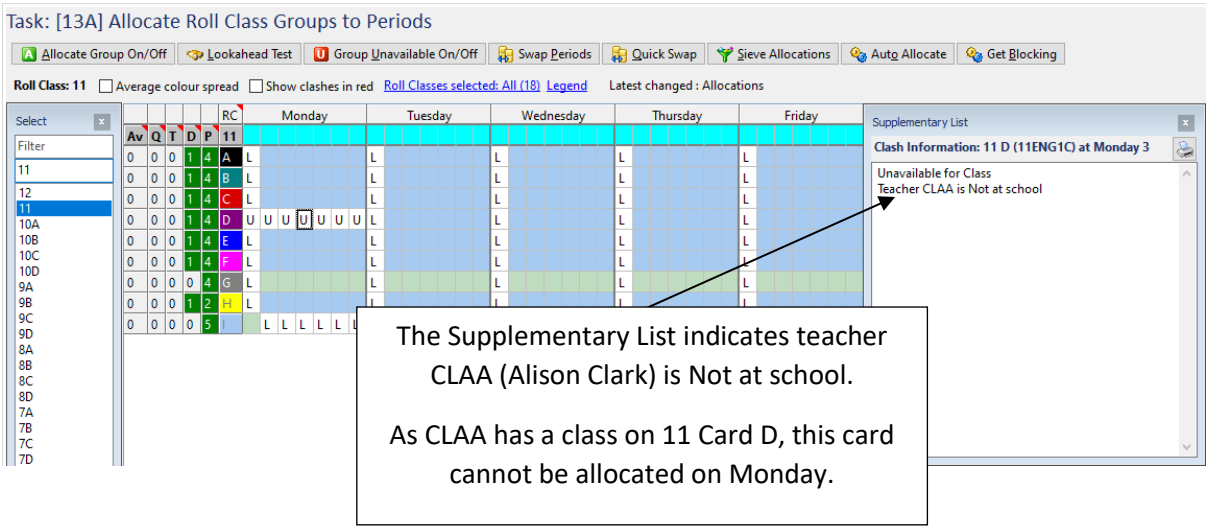




No	Teacher	PL	AL	Diff	C	Monday							Tuesday							Wednesday							Thursday							Friday						
1	ADAR	12.00	10.00	-2.00																																				
2	ALDD	24.00	24.00	0.00																																				
3	ATKD	24.00	23.00	-1.00																																				
4	BAKC	12.00	12.00	0.00		N	N	N	N	N	N	N	N	N	N	N	N	N	N																					
5	BELH	24.00	23.00	-1.00																																				
6	BOSS	24.00	24.00	0.00																																				
7	BOYJ	24.00	21.00	-3.00																																				
8	BURK	24.00	23.00	-1.00																																				
9	BUTA	24.00	24.00	0.00																																				
10	CARL	24.00	24.00	0.00																																				
11	CHAJ	24.00	24.00	0.00																																				
12	CHEW	24.00	22.00	-2.00																																				
13	CLAA	18.00	17.00	-1.00		N	N	N	N	N	N	N																												
14	CLAM	24.00	24.00	0.00																																				
15	CONJ	24.00	24.00	0.00																																				
16	COOD	24.00	23.00	-1.00																																				
17	DALJ	24.00	23.00	-1.00																																				
18	EDWJ	24.00	21.00	-3.00																																				

On the Task Tree select:
[13A] Roll Class Allocations



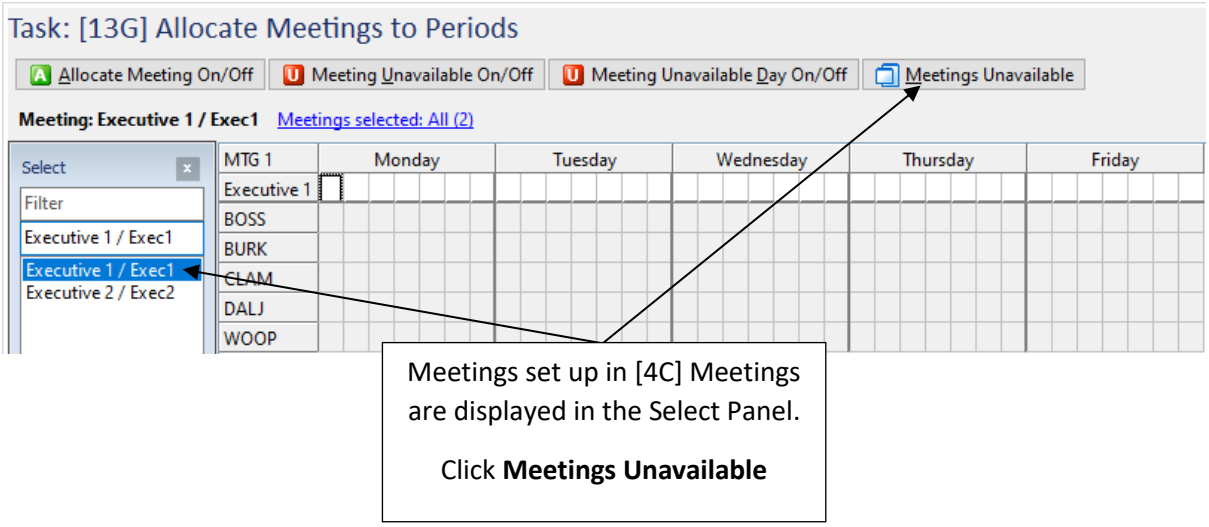


MEETINGS UNAVAILABLE

The allocation of meetings can be controlled by making meetings unavailable for individual or multiple periods.

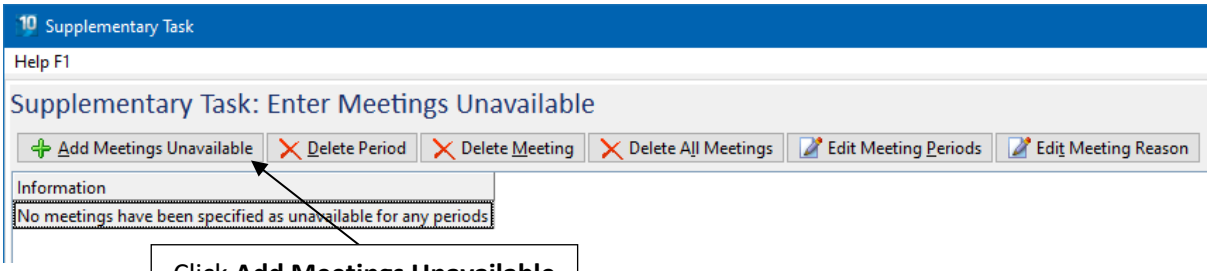
Meetings can be entered for a single period only. If a meeting requires multiple periods, the meeting needs to be copied. In this example, the Executive Meeting must be scheduled on Monday, Periods 3 and 4.

On the Task Tree select:
[13G] Meeting Allocations

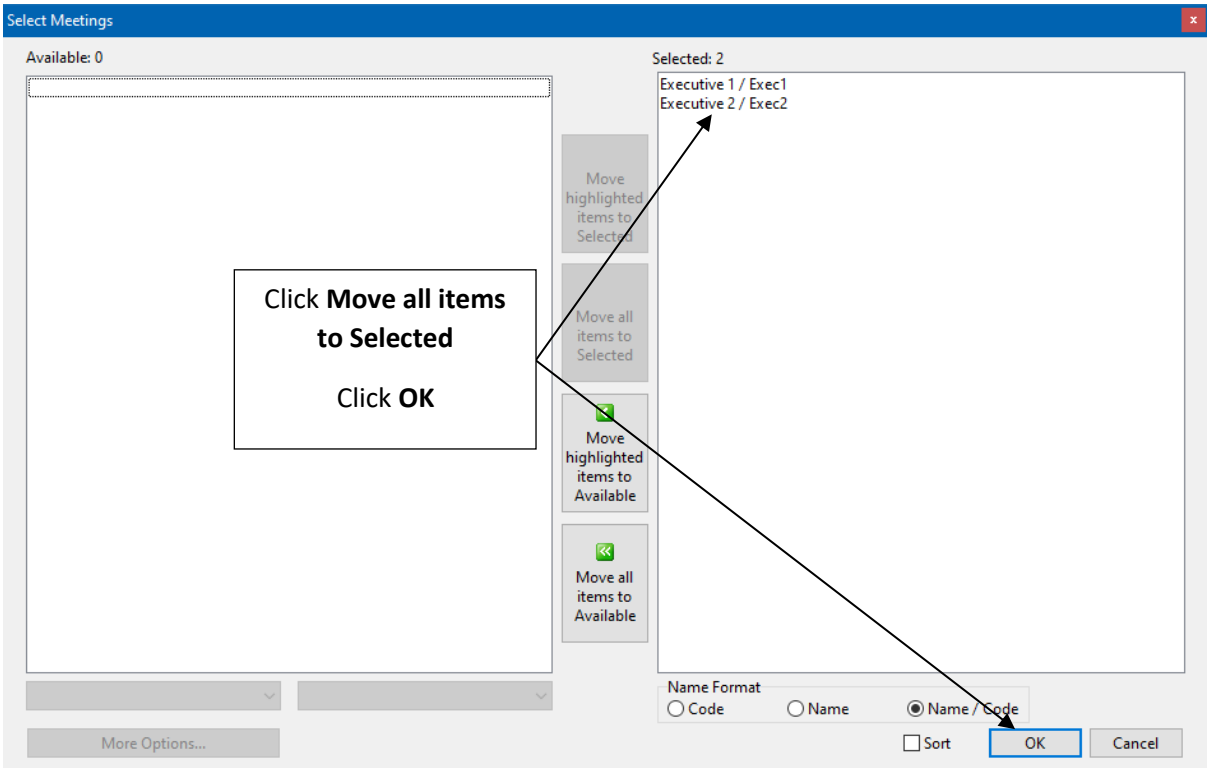


Meetings set up in [4C] Meetings are displayed in the Select Panel.

Click **Meetings Unavailable**

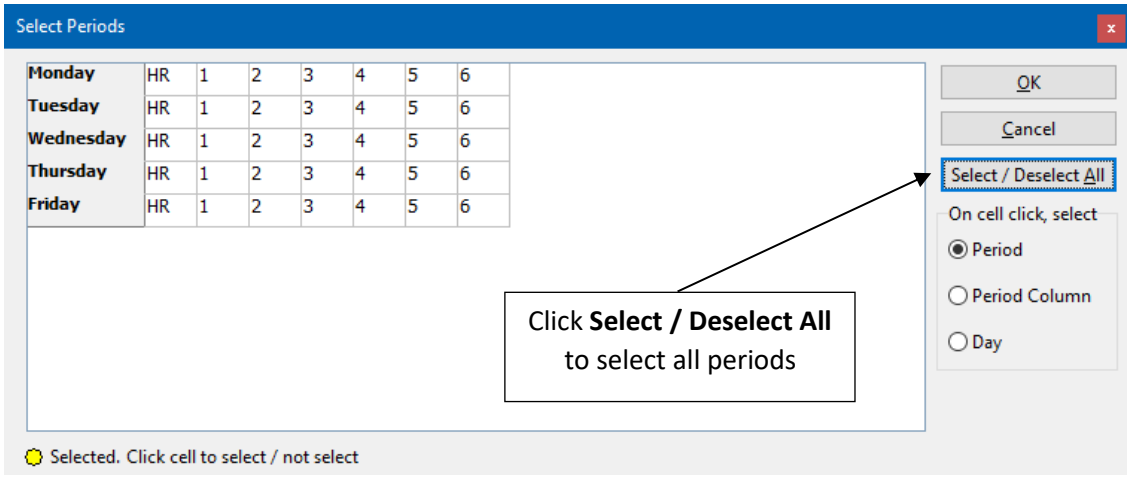


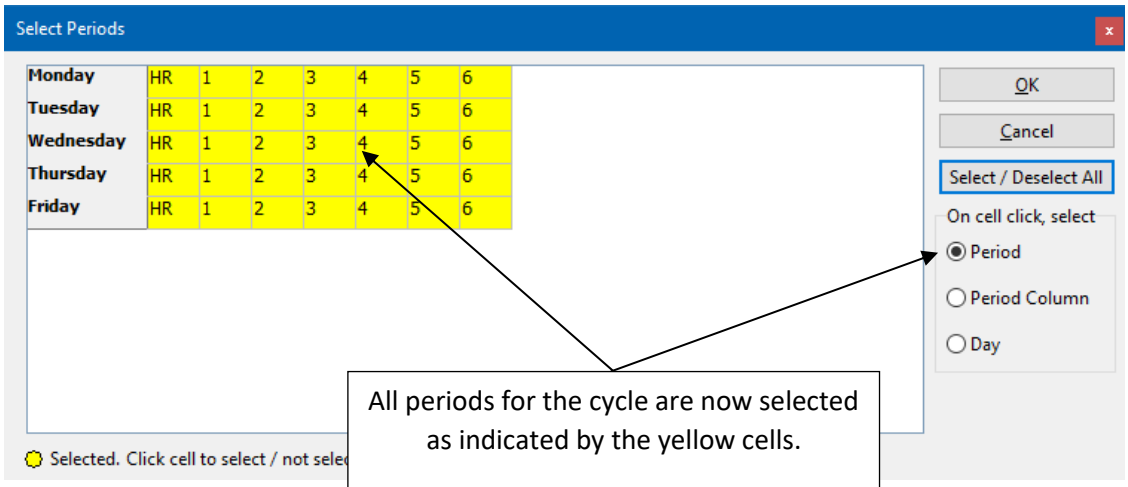
Click **Add Meetings Unavailable**

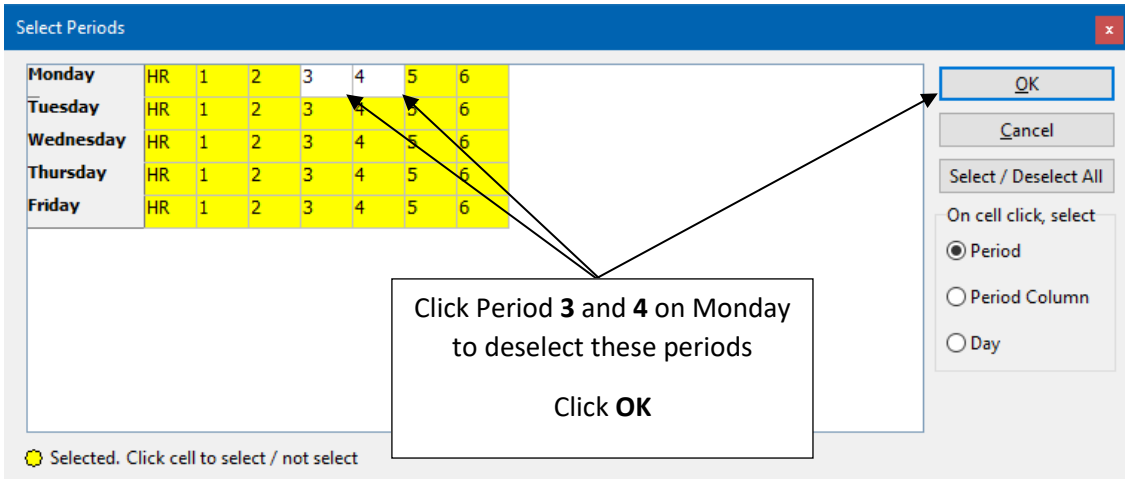


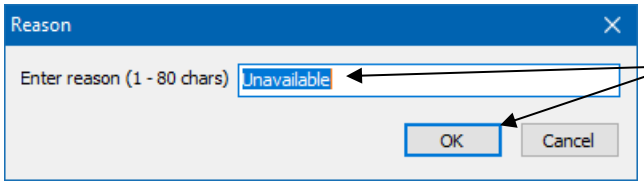
Click **Move all items to Selected**

Click **OK**

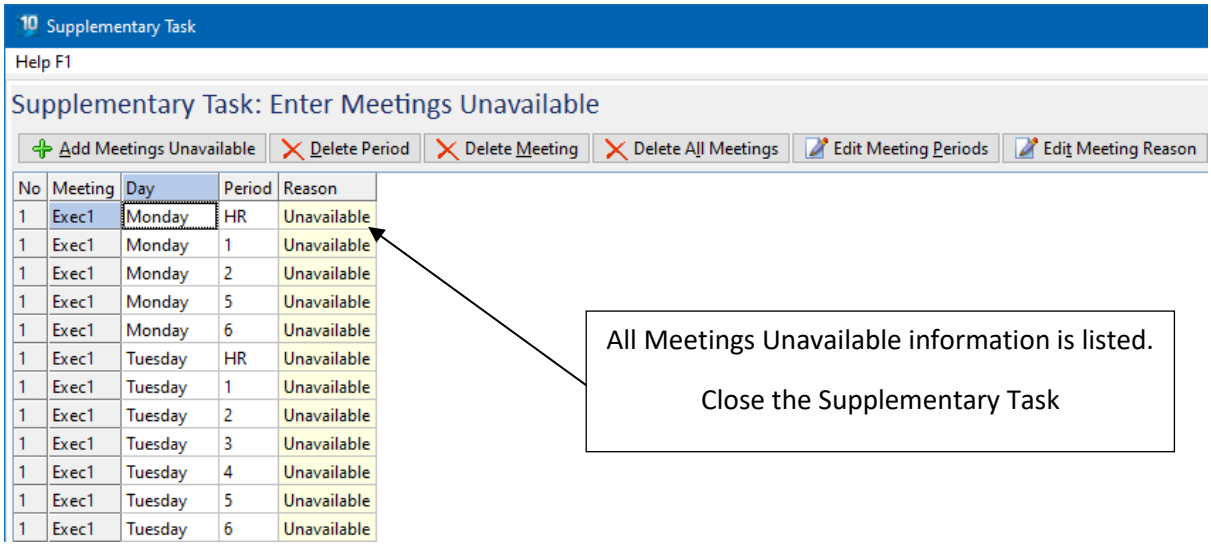

Select Periods
Monday HR 1 2 3 4 5 6
Tuesday HR 1 2 3 4 5 6
Wednesday HR 1 2 3 4 5 6
Thursday HR 1 2 3 4 5 6
Friday HR 1 2 3 4 5 6
OK
Cancel
Select / Deselect All
On cell click, select
Period
Period Column
Day
Click Select / Deselect All to select all periods
Selected. Click cell to select / not select


Select Periods
Monday HR 1 2 3 4 5 6
Tuesday HR 1 2 3 4 5 6
Wednesday HR 1 2 3 4 5 6
Thursday HR 1 2 3 4 5 6
Friday HR 1 2 3 4 5 6
OK
Cancel
Select / Deselect All
On cell click, select
Period
Period Column
Day
All periods for the cycle are now selected as indicated by the yellow cells.
Ensure that Period is selected
Selected. Click cell to select / not sele


Select Periods
Monday HR 1 2 3 4 5 6
Tuesday HR 1 2 3 4 5 6
Wednesday HR 1 2 3 4 5 6
Thursday HR 1 2 3 4 5 6
Friday HR 1 2 3 4 5 6
OK
Cancel
Select / Deselect All
On cell click, select
Period
Period Column
Day
Click Period 3 and 4 on Monday to deselect these periods
Click OK
Selected. Click cell to select / not select

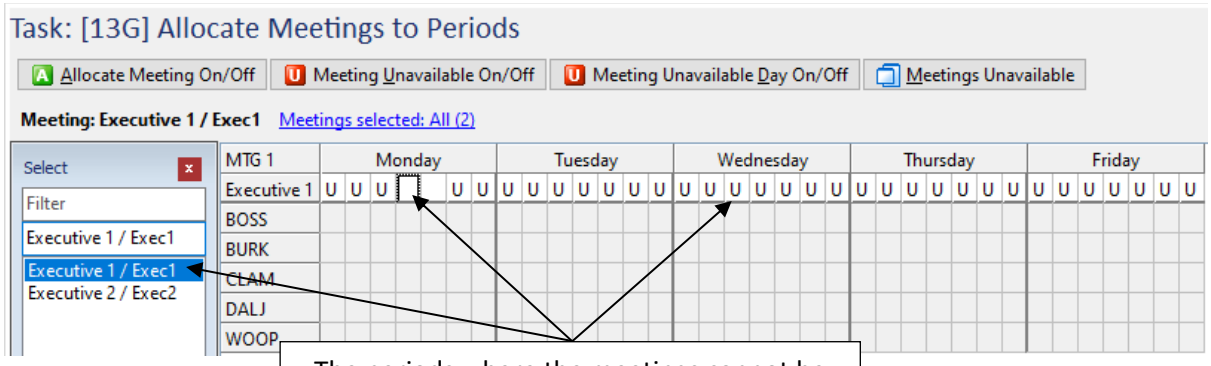


Leave the default reason as "Unavailable" and click **OK**



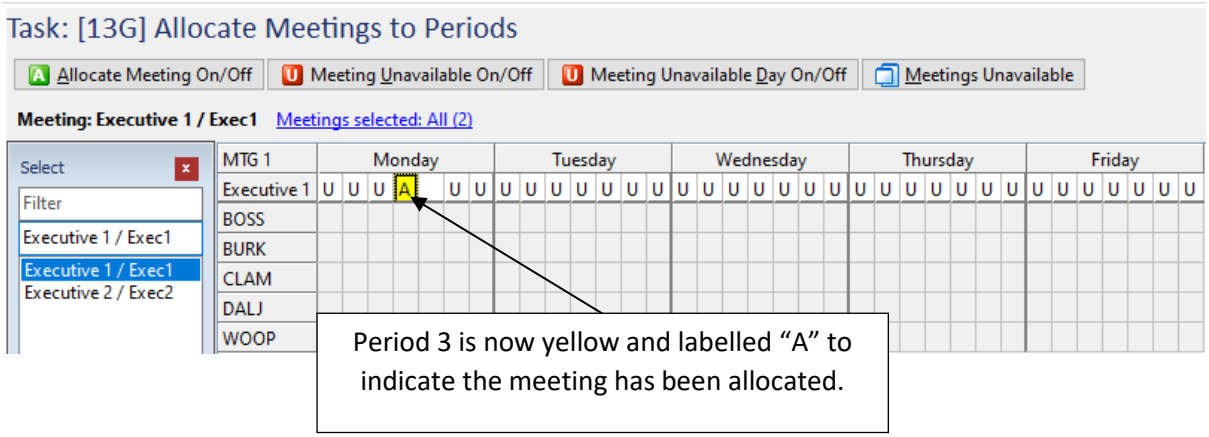
All Meetings Unavailable information is listed.

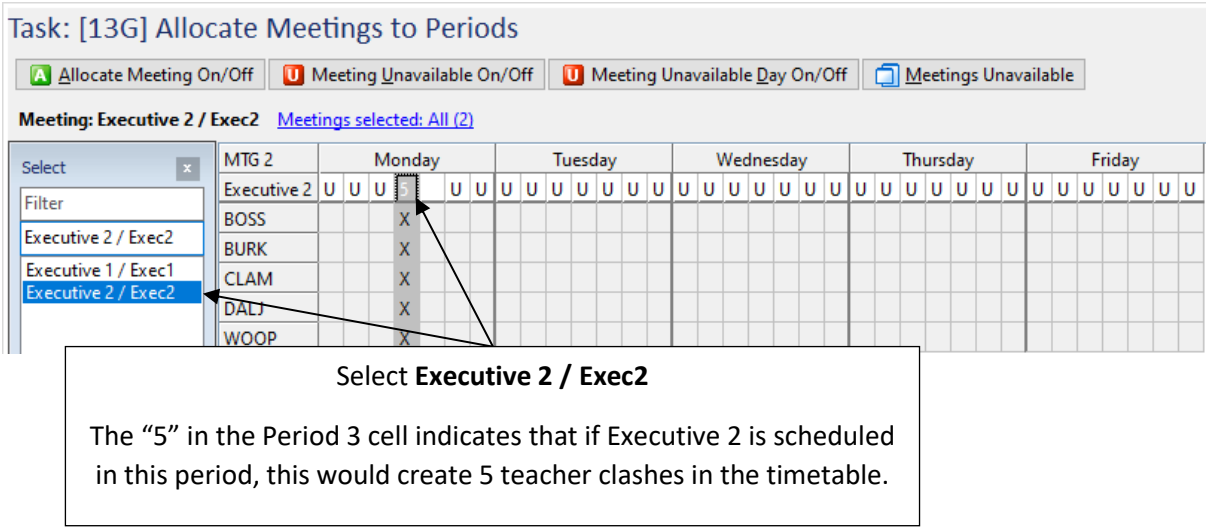
Close the Supplementary Task

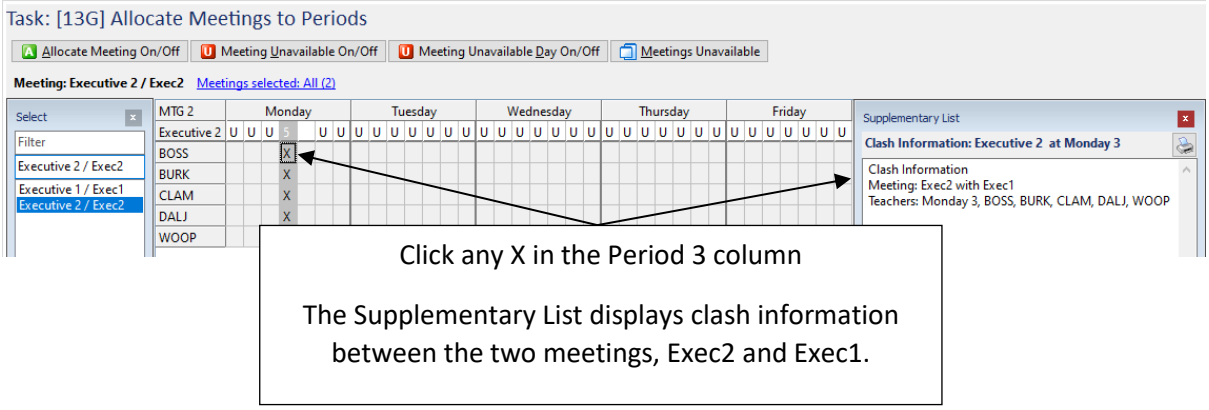


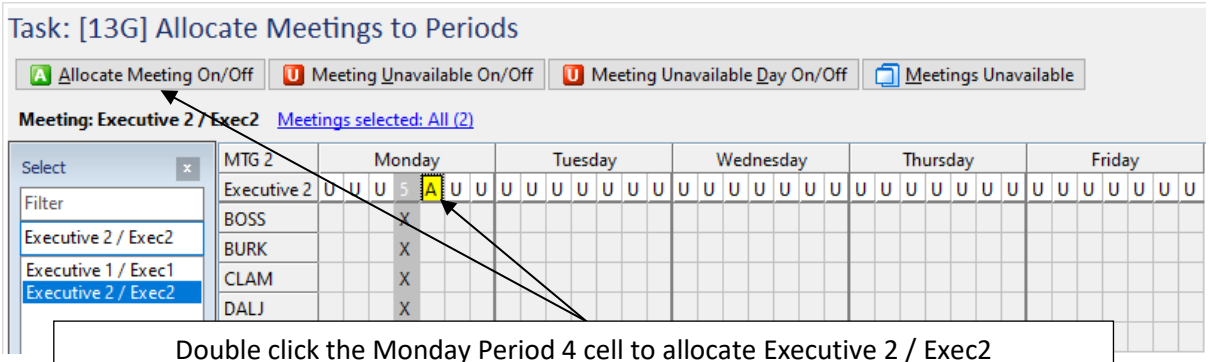
The periods where the meetings cannot be scheduled are now labelled "U".

Select **Executive 1 / Exec1** and double click the Period 3 cell for Monday


Task: [13G] Allocate Meetings to Periods
Allocate Meeting On/Off
Meeting Unavailable On/Off
Meeting Unavailable Day On/Off
Meetings Unavailable
Meeting: Executive 1 / Exec1
Meetings selected: All (2)
Select
Filter
Executive 1 / Exec1
Executive 1 / Exec1
Executive 2 / Exec2
MTG 1
Monday
Tuesday
Wednesday
Thursday
Friday
Executive 1
BOSS
BURK
CLAM
DALJ
WOOP
Period 3 is now yellow and labelled “A” to indicate the meeting has been allocated.


Task: [13G] Allocate Meetings to Periods
Allocate Meeting On/Off
Meeting Unavailable On/Off
Meeting Unavailable Day On/Off
Meetings Unavailable
Meeting: Executive 2 / Exec2
Meetings selected: All (2)
Select
Filter
Executive 2 / Exec2
Executive 1 / Exec1
Executive 2 / Exec2
MTG 2
Monday
Tuesday
Wednesday
Thursday
Friday
Executive 2
BOSS
BURK
CLAM
DALJ
WOOP
Select Executive 2 / Exec2
The “5” in the Period 3 cell indicates that if Executive 2 is scheduled in this period, this would create 5 teacher clashes in the timetable.


Task: [13G] Allocate Meetings to Periods
Allocate Meeting On/Off
Meeting Unavailable On/Off
Meeting Unavailable Day On/Off
Meetings Unavailable
Meeting: Executive 2 / Exec2
Meetings selected: All (2)
Supplementary List
Clash Information: Executive 2 at Monday 3
Clash Information
Meeting: Exec2 with Exec1
Teachers: Monday 3, BOSS, BURK, CLAM, DALJ, WOOP
Click any X in the Period 3 column
The Supplementary List displays clash information between the two meetings, Exec2 and Exec1.

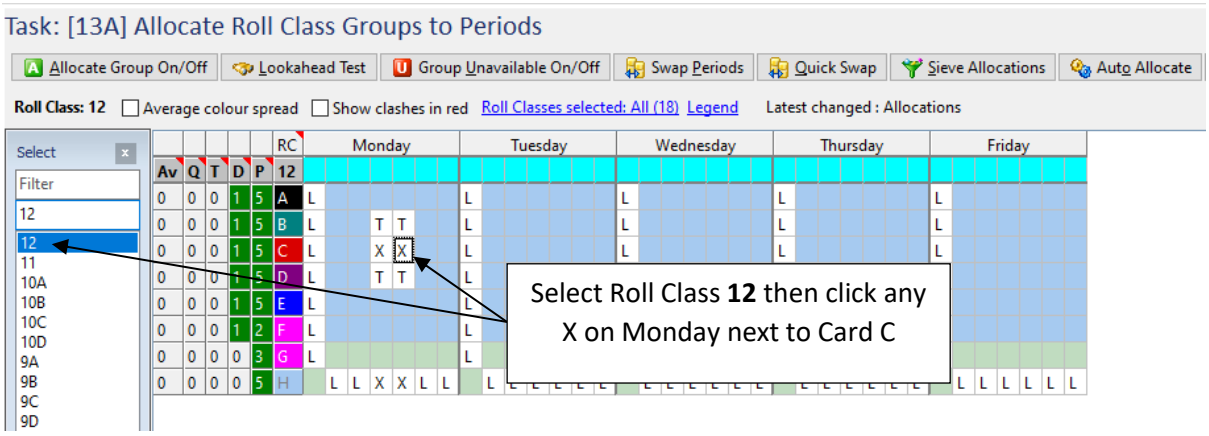


Double click the Monday Period 4 cell to allocate Executive 2 / Exec2

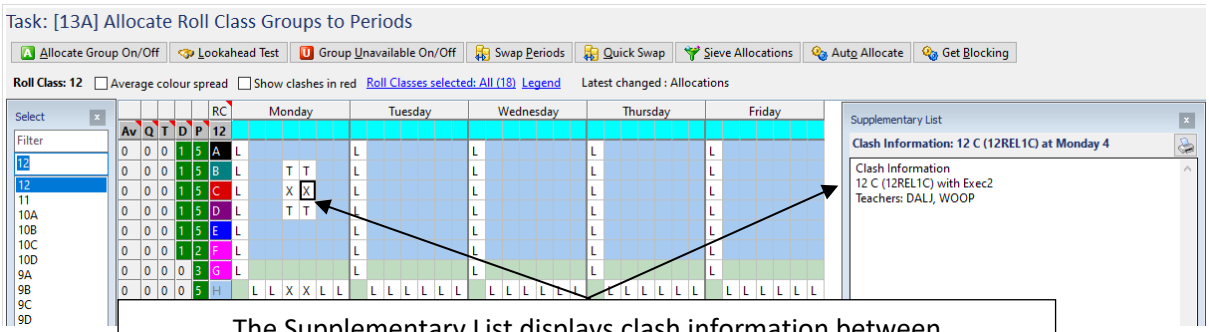
Note: The Allocate Meeting On/Off function can also be used to allocate a meeting.

Click **Save**

On the Task Tree select:
[13A] Class Allocations

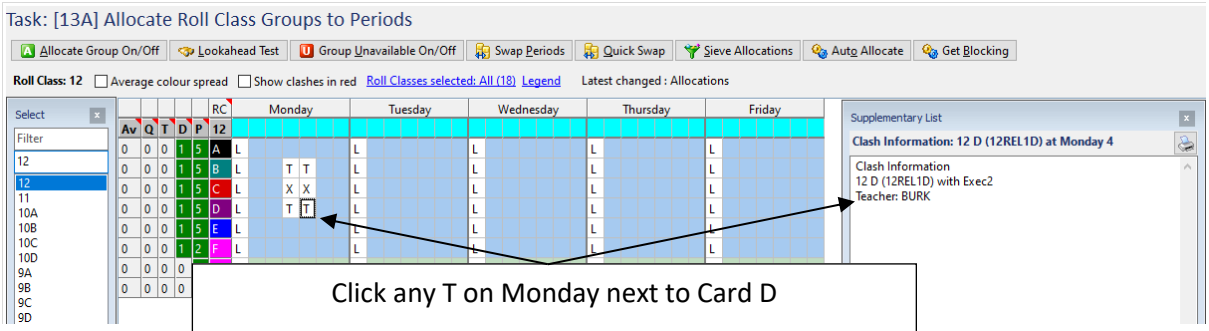


Select Roll Class **12** then click any X on Monday next to Card C



The Supplementary List displays clash information between Roll Class 12 Card C and the Executive Meeting.

As DALJ and WOOP have a class on 12 Card C, this card cannot be allocated on Monday Periods 3 or 4 due to the placement of the Executive meeting.



Click any T on Monday next to Card D

The Supplementary List displays clash information between Roll Class 12 Card D and the Executive Meeting.

As BURK has a class on 12 Card D, this card also cannot be allocated on Monday Periods 3 or 4.

GROUPS UNAVAILABLE

The [13B] Groups Unavailable screen is used to prevent classes from being scheduled at particular times.

In this example, the Sport blocks (or cards) must be allocated to the following double periods:

Year Level	Class	Day	Periods
9-10	Sport	Monday	5 and 6
7-8	Sport	Tuesday	5 and 6
11	Sport	Wednesday	5 and 6

As there is no flexibility regarding the days and times that these Sport double lessons occur, the placement of the cards will first be controlled, then the cards will be allocated to the correct periods on the timetable.

All Classes can be used to identify the Sport cards when setting up [13B] Groups Unavailable.

Class information - Roll Classes selected: All (18)

Roll Class	A	B	C	D	E	F	G	H	I	J	K	Pds
12	JONA 12REL1A 5.1	DALJ 12REL1B 5.1	DALJ 12REL1C 5.1	JONA 12REL1D 5.1	KELR 12REL1E 5.1	JONA 12REL1F 2.1	JONA 12REL1F 3	DALJ 12HRM1A 5				35
	PEAS 12ENG1A 5.1	BUTA 12ENS1A 5.1	BOYJ 12ENG1B 5.1	BURK 12ENG1C 5.1	MARD 12ENG1D 5.1	MANK 12ENG1E 2.1	MANK 12ENG1E 3	BUTA 12HRM1B 5				35
	THOW 12MTE1A 5.1 AT8	MULS 12INF1A 5.1 S15C	WALS 12CHE1A 5.1 LAB1	JACC 12ENS1B 5.1	BUTA 12BIO1A 5.1 LAB1	HARB 12ACC1A 2.1 S16C	HARB 12ACC1A 3	GIBM 12HRM1C 5				35
	BELH 12MAA1A 5.1	ROGP 12MAA1B 5.1	MULS 12LST1A 5.1	WALP 12MAX1A 5.1	WHIE 12ECO1A 5.1	YOUB 12GRA1A 2.1 AT3	YOUB 12GRA1A 3 AT3	WHIE 12HRM1D 5				35
	BUTA 12MAG1A 5.1	GIBM 12MAG1B 5.1	FENJ 12SYS1A 5.1 S16C	ALDD 12PED1A 5.1	COOD 12PHY1B 5.1 LAB2	CHAJ 12PED1B 2.1	CHAJ 12PED1B 3					30
	CARL 12OED1A 5.1						12PST1F 3					30
	12PST1A 5.1											10
11	WHIE 11ACC1A 4.1					ENG1E	KNIN 11REL1A 4	JACC 11SPT1A 2.1 OV1	RENM 11HRM1A 5			35
	JACC 11ENS1A 4.1					ART1B	MARD 11REL1B 4	FRAM 11SPT1B 2.1 GYM1	CHAJ 11HRM1B 5			35
	MULS 11INF1A 4.1 S15C					BIO1A	GIBS 11REL1C 4	CHAJ 11SPT1C 2.1 GYM2	EDWJ 11HRM1C 5			35
	BELH 11MAA1A 4.1	CHAJ 11PED1A 4.1	SMYM 11GRA1A 4.1 AT3	CHAJ 11GEO1A 4.1	WALP 11MAG1C 4.1	JACC 11ENS1B 4.1	SIMK 11REL1D 4	ALDD 11SPT1D 2.1	COOD 11HRM1D 5			35
	WALP 11MAG1A 4.1	THOW 11SYS1A 4.1 S16C	THOW 11MTE1A 4.1 AT8	NANT 11ITA1A 4.1	COOD 11PHY1A 4.1 LAB2	GIBM 11MAE1A 4.1						24
				EDWJ 11OED1A 4.1		CARL 11PED1B 4.1						8
				CLAA 11TEX1A 4.1 AT4								4
10A	KNIN 10RED1A 3	CHEW 10SCI1A 4.1	MANK 10SOS1A 3	FRAM 10HPE1A 2.1	DALJ 10ENG1A 4	MYEJ 10MAA1A 4	HARB 10ACC1A 4.1	NANT 10ITA1A 4.1	CHAJ 10SPT1A 2.1 OV1	KNIN 10HRM1A 5		35
10B	KNIN 10RED1B 3	WALS 10SCI1B 4.1	SMYM 10SOS1B	ATKD 10HPE1B	MANK 10ENG1B	NEWP 10MAA1B	GIBS 10FRE1A	THOW 10MET1A 4.1 AT8	NEWP 10SPT1B 2.1 GYM1	SMYM 10HRM1B 5		35
10C	TALP 10RED1C 3	CHEW					10MED1A	MILD 10PHO1A	PATM 10SPT1C 2.1 GYM2	JACT 10HRM1C 5		35
10D	SMYM 10RED1D 3	WOOP 4.1					10MUS1A	FRAM 10SPS1A 4.1	EDWJ 10SPT1D 2.1	CONJ 10HRM1D 5		35
							10OED1A	FENJ 10SYS1A 4.1 M19C				16
							10TEX1A AT4	EDWJ 10WOO1A 4.1 AT7				12
9A	MYEJ 09RED1A 3	ADAR 3					09FRE1A	RENM 09ART1A 3.1	RENM 09ART1B 3.1	FRAM 09SPT1A 2.1	BELH 09HRM1A 5	35
9B	KNIN 09RED1B 3	ROGP 3		2.1			09FRE1B	MILD 09DRA1A 3.1 PAC2	MILD 09DRA1B 3.1 PAC2	ALDD 09SPT1B 2.1	PEAS 09HRM1B 5	35
9C	KNIN 09RED1C 3	CHEW 09SCI1C 3	JACT 09GEO1C 3	EDWJ 09PEB1B 2.1	MARD 09ENG1C 4	MYEJ 09MAT1C 4	CLAM 09ITA1A 3	CONJ 09MUS1A 3.1	FENJ 09MET1A 3.1 AT8	ATKD 09SPT1C 2.1	SIMK 09HRM1C 5	35
9D	WALP 09RED1D 3	FRAM 09SCI1D 3	SMYM 09HIS1D 3	ATKD 09PEG1B 2.1	BOYJ 09ENG1D 4	WALP 09MAT1D 4	NANT 09ITA1B 3	CLAA 09TEX1A 3.1 AT4	CONJ 09MUS1B 3.1	MURJ 09SPT1D 2.1	BOYJ 09HRM1D 5	35
					SIMK 09ENG1E 4	ROGP 09MAT1E 4	PATM 09LSP1A 3	EDWJ 09WOO1A 3.1 AT7	EDWJ 09WOO1B 3.1 AT7	CONJ 09SPT1E 2.1		19
										CARL 09SPT1F 2.1		2
8A	KELR 08RED1A 3	JACT 08ENG1A 4	WOOP 08MAT1A 4	WOOP 08SCI1A 4.1	WHIE 08GEO1A 3	ALDD 08HPE1A 3.1	GIBS 08FRE1A 3	RENM 08ART1A 2.1	RENM 08ART1B 2.1	CHAJ 08SPT1A 2.1 OV1	CARL 78HRB1A 5	35
8B	GIBS 08RED1B 3	MANK 08ENG1B 4	GIBM 08MAT1B 4	ADAR 08SCI1B 4.1	JACT 08GEO1B 3	ATKD 08HPE1B 3.1	MURJ 08FRE1B 3	MILD 08DRA1A 2.1 PAC2	MILD 08DRA1B 2.1 PAC2	WOOP 08SPT1B 2.1 GYM1	YOUB 78HRB1B 5	35
8C	KNIN 08RED1C 3	KELR 08ENG1C 4	NEWP 08MAT1C 4	FRAM 08SCI1C 4.1	SMYM 08GEO1C 3	ALDD 08HPE1C 3.1	NANT 08ITA1A 3	CONJ 08MUS1A 2.1	CONJ 08MUS1B 2.1	THOW 08SPT1C 2.1 GYM2	MURJ 78HRH1A 5	35
8D	JACT 08RED1D 3	MANK 08ENG1D 4	MYEJ 4				8FOO1A		CARL 08FOO1B 2.1 AT5	ATKD 08SPT1D 2.1	PATM 78HRH1B 5	35
							8TEX1A		CLAA 08TEX1B 2.1 AT4	EDWJ 08SPT1E 2.1		9
							TE1A		FENJ 08DTE1B 2.1	CARL 08SPT1F 2.1		6
7A	TALP 07RED1A 3	MARD 07ENG1A 5	NEWP 5				7MUS1A		MURJ 07FRE1A 3	FENJ 07SPT1A 2.1	MARD 78HRS1A 5	35
7B	BOYJ 07RED1B 3	TALP 07ENG1B 5	GIBM 5	3	3	2.1	2 PAC2	7MUS1B 2	NANT 07ITA1B 3	WALS 07SPT1B 2.1	ATKD 78HRS1B 5	35
7C	DALJ 07RED1C 3	SIMK 07ENG1C 5	MYEJ 07MAT1C 5	ROGP 07SCI1C 3	WHIE 07HIS1C 3	ATKD 07HPE1C 2.1	YOUB 07DRA1C 2 PAC2	BAKC 07MUS1C 2	GIBS 07FRE1C 3	YOUB 07SPT1C 2.1	FENJ 78HRT1A 5	35
7D	KNIN 07RED1D 3	PEAS 07ENG1D 5	NEWP 07MAT1D 5	CHEW 07SCI1D 3	SMYM 07HIS1D 3	ALDD 07HPE1D 2.1	YOUB 07DRA1D 2 PAC2	BAKC 07MUS1D 2	NANT 07ITA1D 3	FRAM 07SPT1D 2.1	ALDD 78HRT1B 5	35
										CONJ 07SPT1E 2.1		2
										CLAA 07SPT1F 2.1		2
Roll Class	A	B	C	D	E	F	G	H	I	J	K	Pds

The Year 11 Sport block is located on Roll Class 11, Card H.

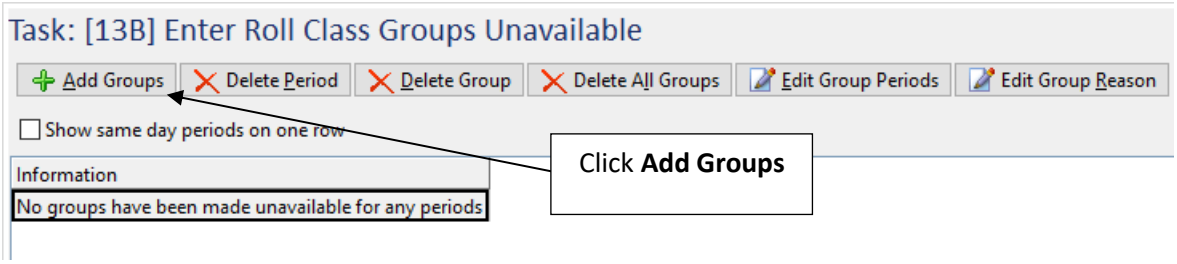
The Year 9-10 Sport MRCG is located on Card I for Year 10 Roll Classes and Card J for Year 9 Roll Classes.

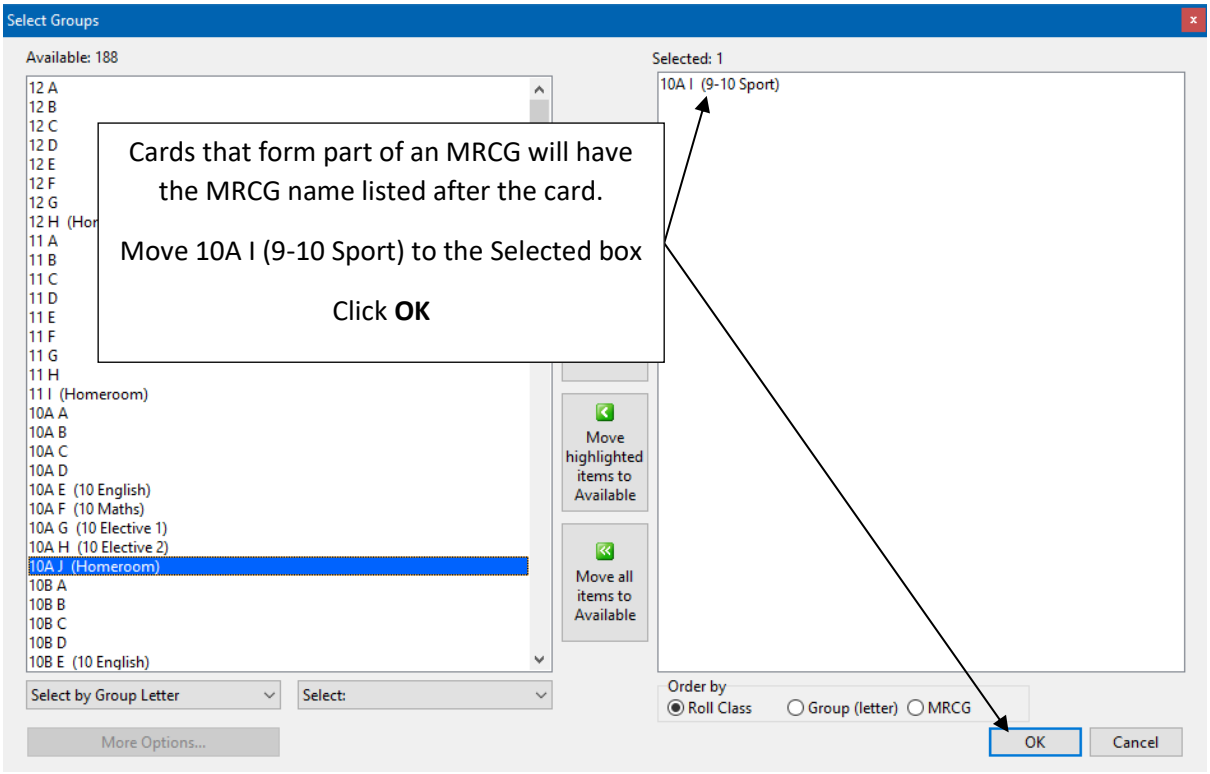
The Year 7-8 Sport MRCG is located on Card J for all Year 7 and 8 Roll Classes.

ENTER GROUPS UNAVAILABLE INFORMATION

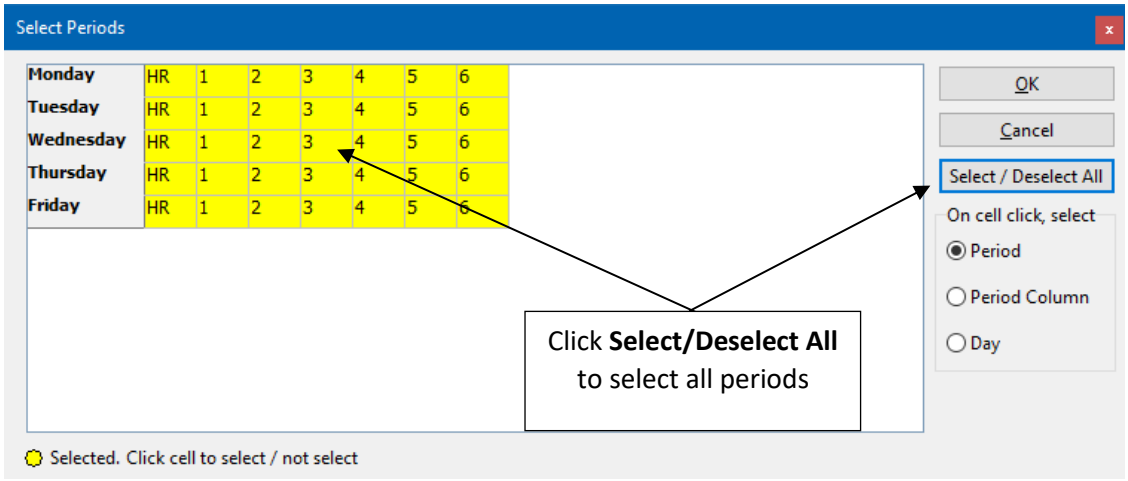
In this example, Groups Unavailable will be entered for all Sport blocks then the Sport classes will be allocated to the correct periods.

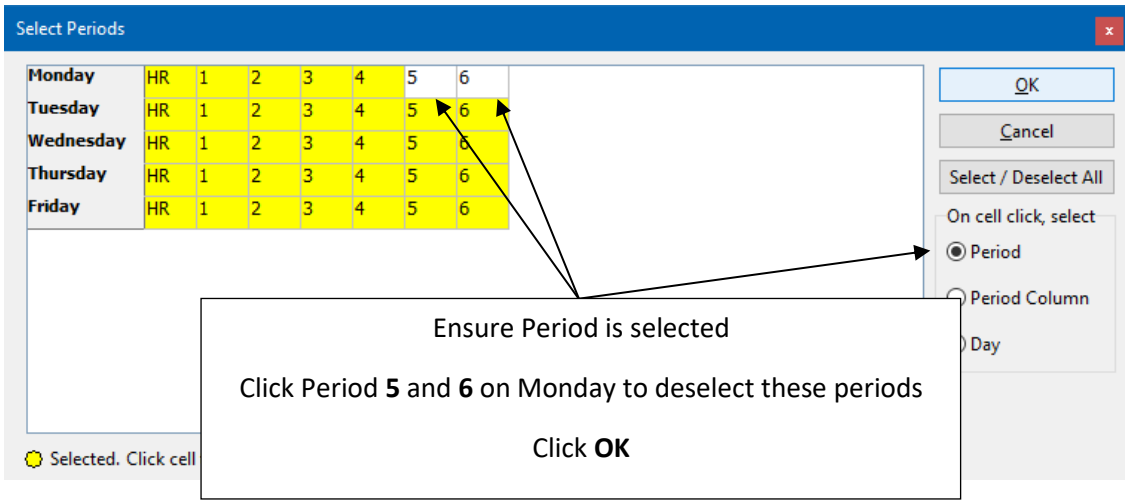
On the Task Tree select:
[13B] Groups Unavailable

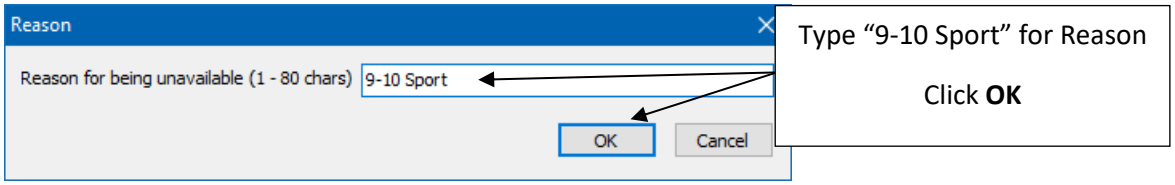


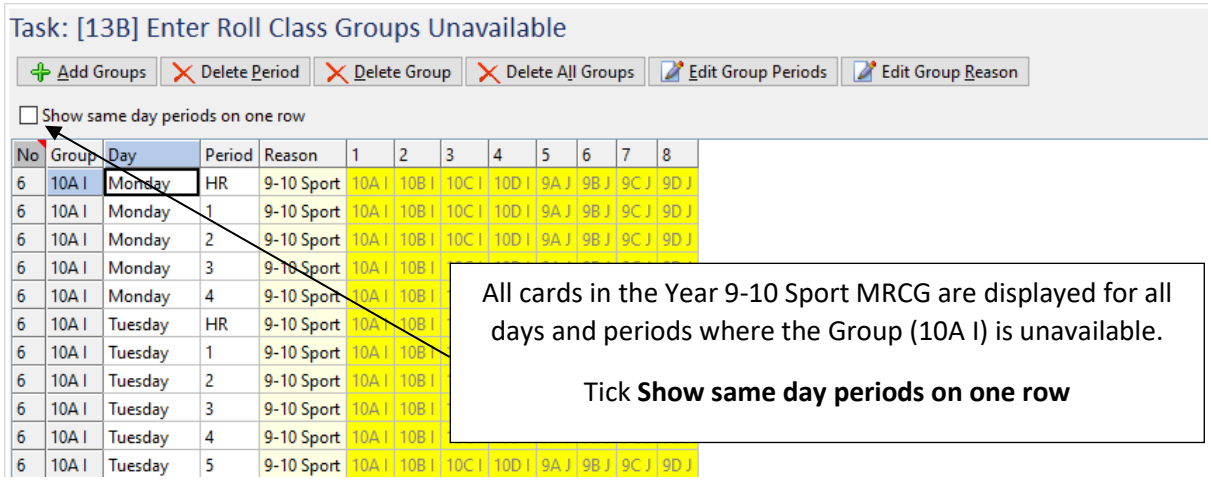


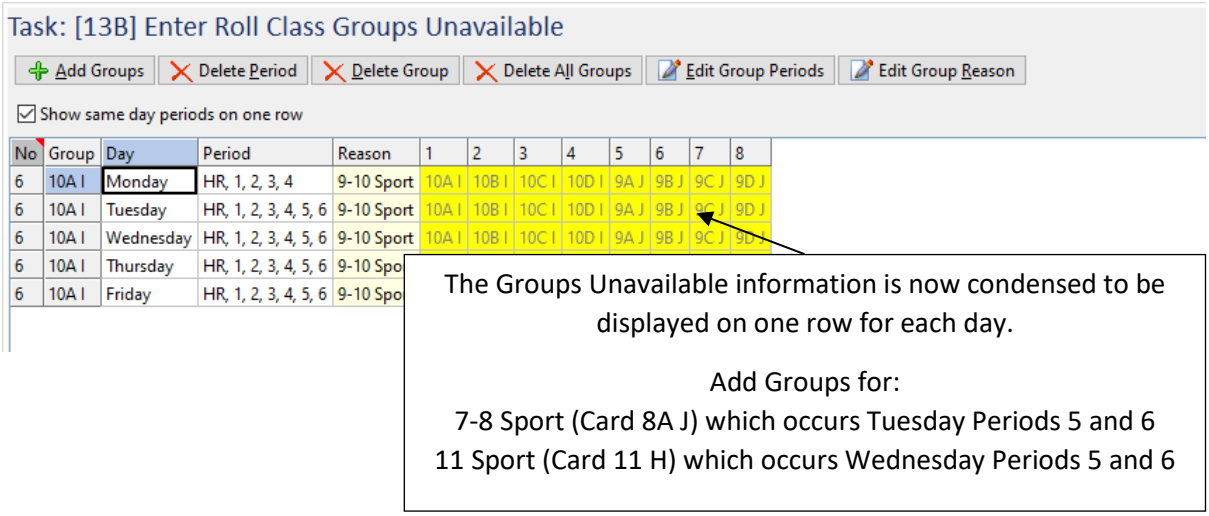
The selected card does not need to be the first-listed group in the MRCG. Any card from the MRCG can be selected for the entire MRCG to be included.

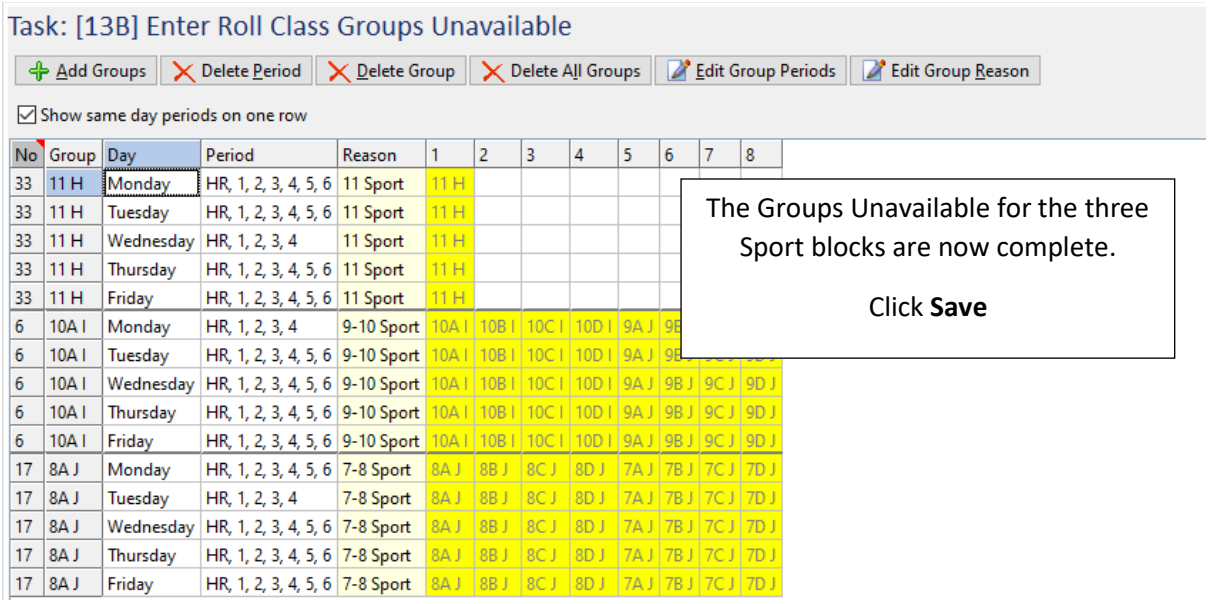

Select Periods
Monday HR 1 2 3 4 5 6
Tuesday HR 1 2 3 4 5 6
Wednesday HR 1 2 3 4 5 6
Thursday HR 1 2 3 4 5 6
Friday HR 1 2 3 4 5 6
OK
Cancel
Select / Deselect All
On cell click, select
Period
Period Column
Day
Click Select/Deselect All to select all periods
Selected. Click cell to select / not select


Select Periods
Monday HR 1 2 3 4 5 6
Tuesday HR 1 2 3 4 5 6
Wednesday HR 1 2 3 4 5 6
Thursday HR 1 2 3 4 5 6
Friday HR 1 2 3 4 5 6
OK
Cancel
Select / Deselect All
On cell click, select
Period
Period Column
Day
Ensure Period is selected
Click Period 5 and 6 on Monday to deselect these periods
Click OK
Selected. Click cell

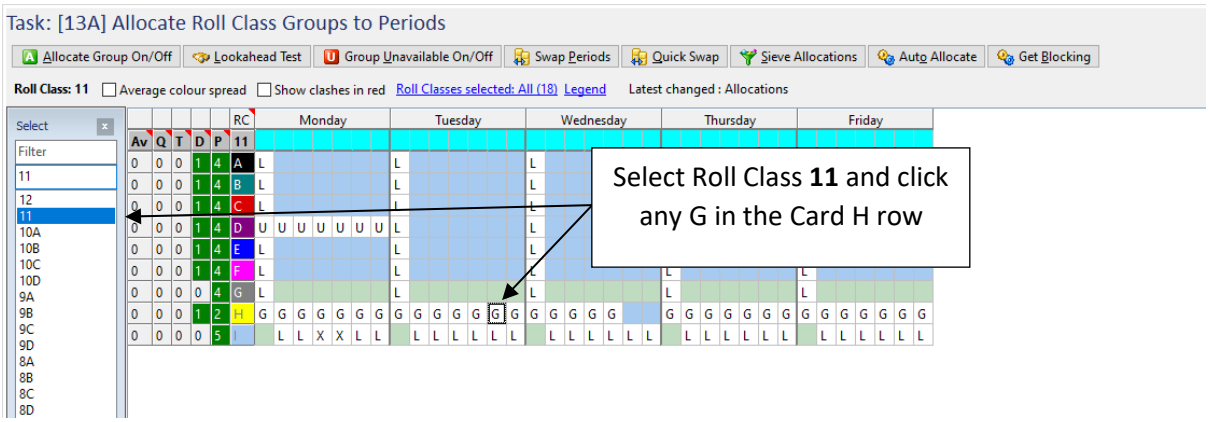

Reason
Reason for being unavailable (1 - 80 chars)
9-10 Sport
OK
Cancel
Type “9-10 Sport” for Reason
Click OK

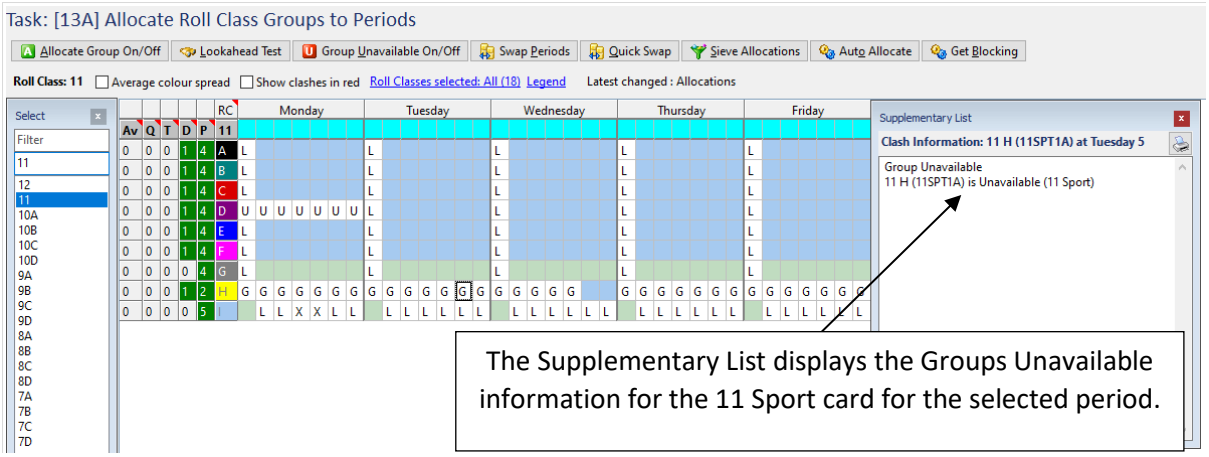

Task: [13B] Enter Roll Class Groups Unavailable
Add Groups
Delete Period
Delete Group
Delete All Groups
Edit Group Periods
Edit Group Reason
Show same day periods on one row
No Group Day Period Reason 1 2 3 4 5 6 7 8
6 10A I Monday HR 9-10 Sport 10A I 10B I 10C I 10D I 9A J 9B J 9C J 9D J
6 10A I Monday 1 9-10 Sport 10A I 10B I 10C I 10D I 9A J 9B J 9C J 9D J
6 10A I Monday 2 9-10 Sport 10A I 10B I 10C I 10D I 9A J 9B J 9C J 9D J
6 10A I Monday 3 9-10 Sport 10A I 10B I
6 10A I Monday 4 9-10 Sport 10A I 10B I
6 10A I Tuesday HR 9-10 Sport 10A I 10B I
6 10A I Tuesday 1 9-10 Sport 10A I 10B I
6 10A I Tuesday 2 9-10 Sport 10A I 10B I
6 10A I Tuesday 3 9-10 Sport 10A I 10B I
6 10A I Tuesday 4 9-10 Sport 10A I 10B I
6 10A I Tuesday 5 9-10 Sport 10A I 10B I 10C I 10D I 9A J 9B J 9C J 9D J
All cards in the Year 9-10 Sport MRCG are displayed for all days and periods where the Group (10A I) is unavailable.
Tick Show same day periods on one row





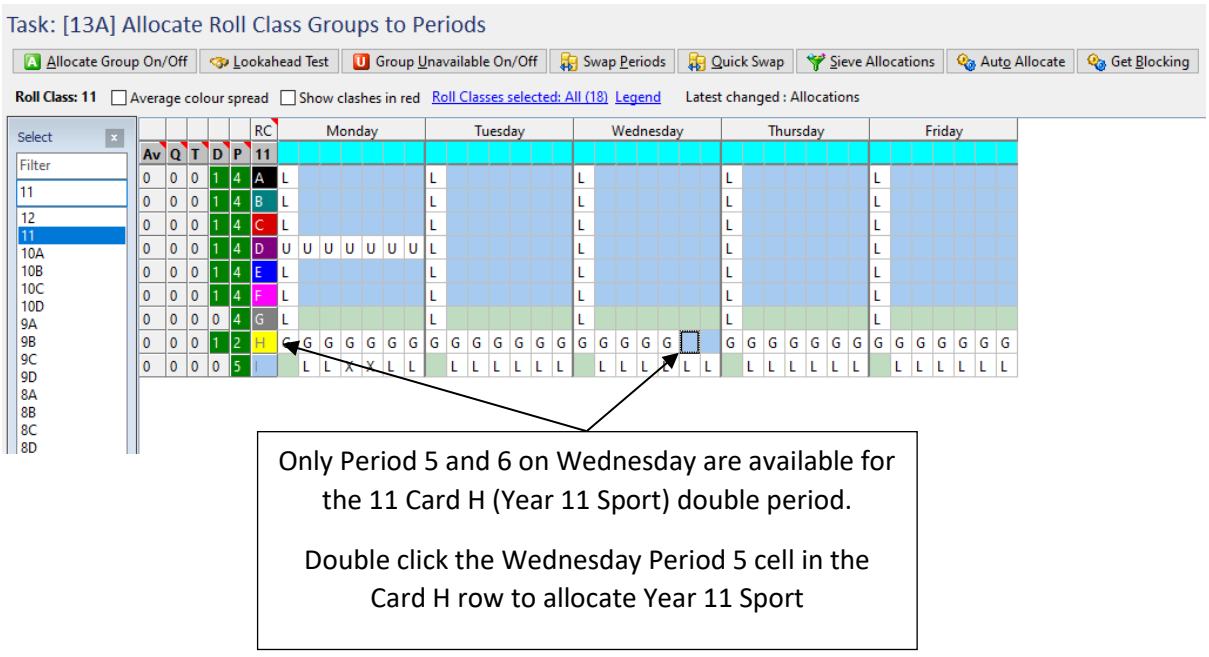
On the Task Tree select:
[13A] Roll Class Allocations

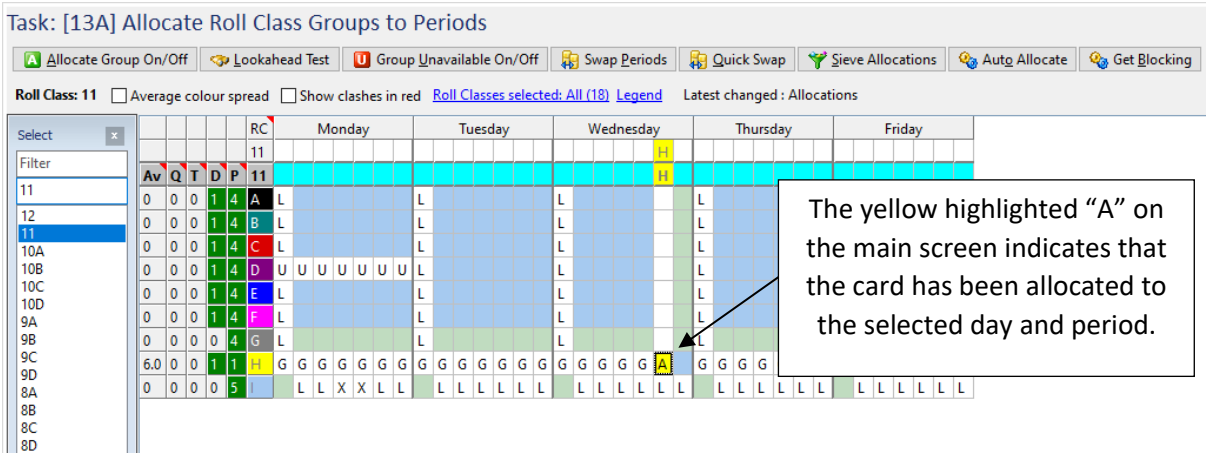


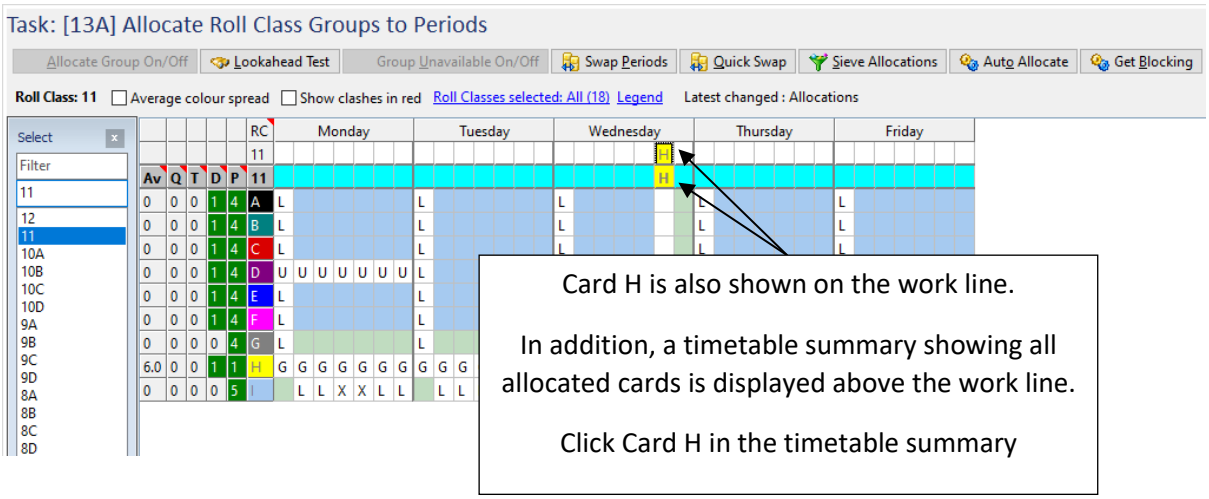


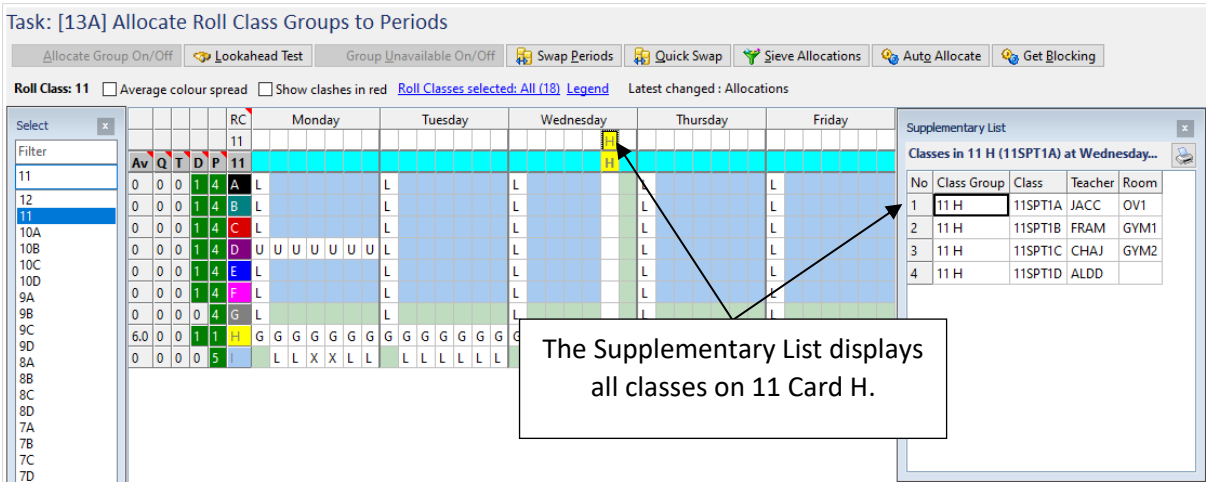
ALLOCATE GROUPS WITH GROUPS UNAVAILABLE INFORMATION

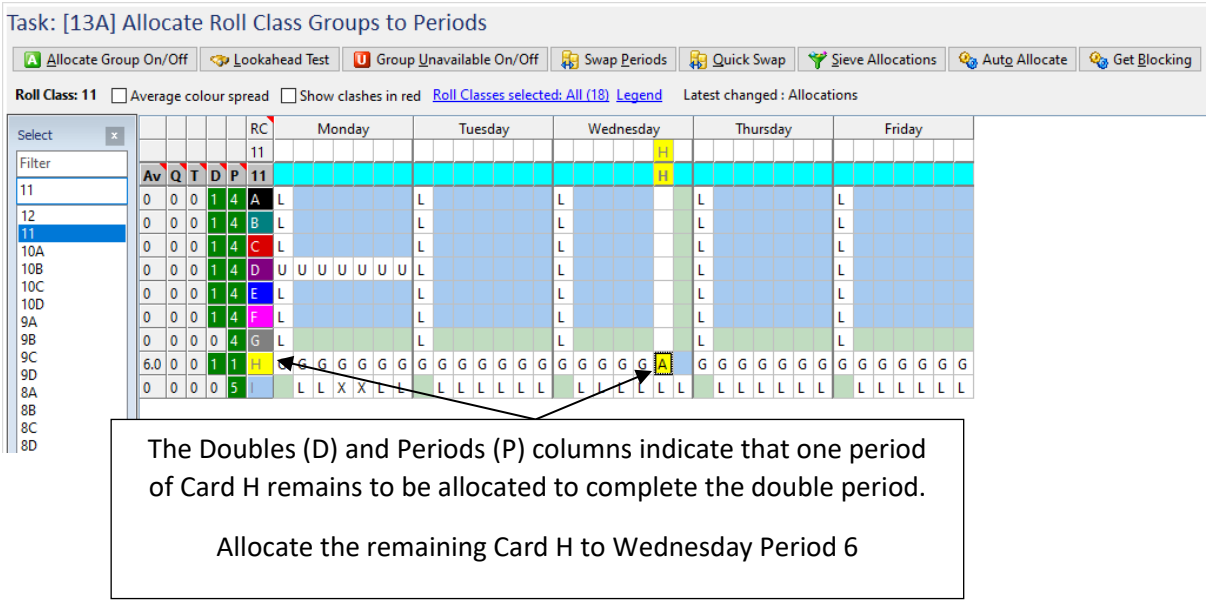
Once the Groups Unavailable have been entered, the group cards can be allocated to the periods when they must be scheduled in the timetable.




Task: [13A] Allocate Roll Class Groups to Periods
Allocate Group On/Off
Lookahead Test
Group Unavailable On/Off
Swap Periods
Quick Swap
Sieve Allocations
Auto Allocate
Get Blocking
Roll Class: 11
Average colour spread
Show clashes in red
Roll Classes selected: All (18)
Legend
Latest changed : Allocations
Monday
Tuesday
Wednesday
Thursday
Friday
The yellow highlighted “A” on the main screen indicates that the card has been allocated to the selected day and period.

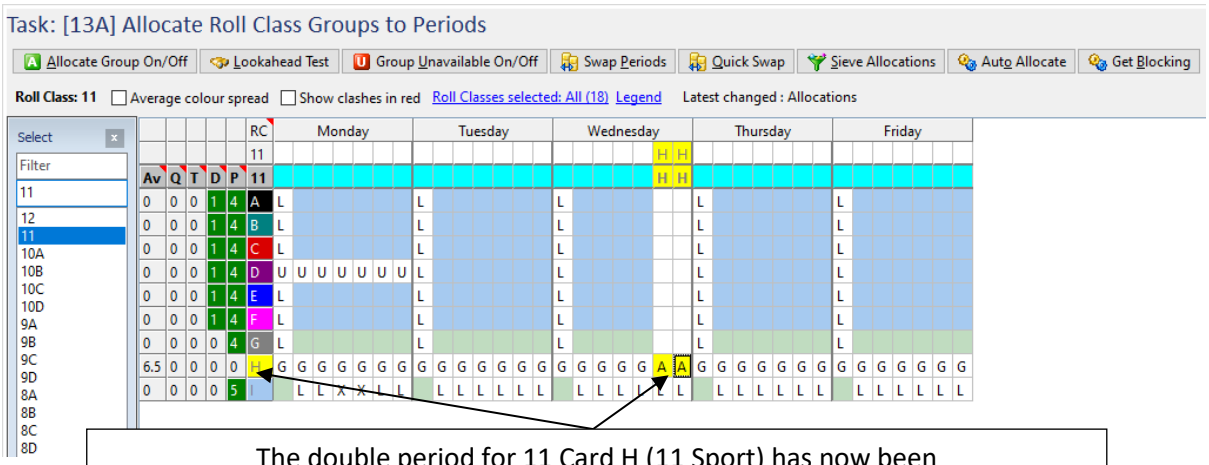

Task: [13A] Allocate Roll Class Groups to Periods
Roll Class: 11
Monday
Tuesday
Wednesday
Thursday
Friday
Card H is also shown on the work line.
In addition, a timetable summary showing all allocated cards is displayed above the work line.
Click Card H in the timetable summary


Task: [13A] Allocate Roll Class Groups to Periods
Roll Class: 11
Monday
Tuesday
Wednesday
Thursday
Friday
Supplementary List
Classes in 11 H (11SPT1A) at Wednesday...
No
Class Group
Class
Teacher
Room
1 11 H 11SPT1A JACC OV1
2 11 H 11SPT1B FRAM GYM1
3 11 H 11SPT1C CHAJ GYM2
4 11 H 11SPT1D ALDD
The Supplementary List displays all classes on 11 Card H.



The Doubles (D) and Periods (P) columns indicate that one period of Card H remains to be allocated to complete the double period.

Allocate the remaining Card H to Wednesday Period 6

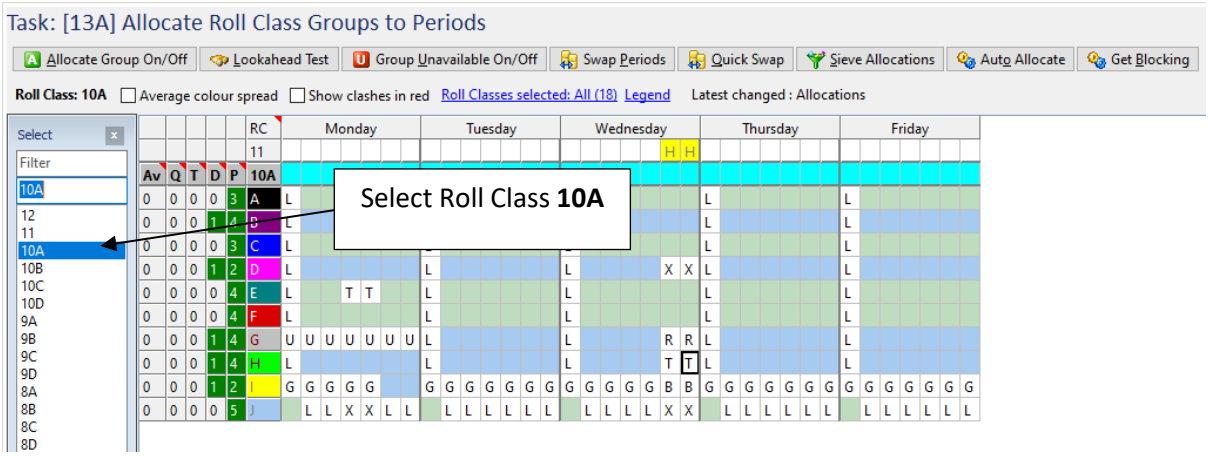


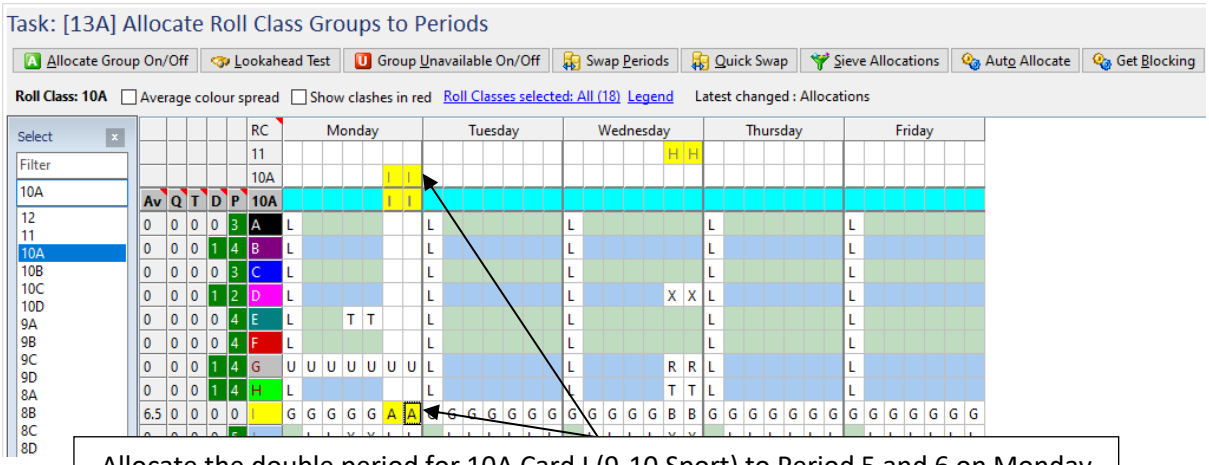
The double period for 11 Card H (11 Sport) has now been allocated to Wednesday Periods 5 and 6.

The Periods (P) column indicates that no periods of Card H remain to be allocated and the Doubles(D) column indicates that no double lessons need to be created.

A card can be removed by:

- double clicking on the letter on the work line or
- double clicking on the A in the lower part of the screen or
- clicking on the A in the lower part of the screen and then clicking the Allocate Group On/Off button

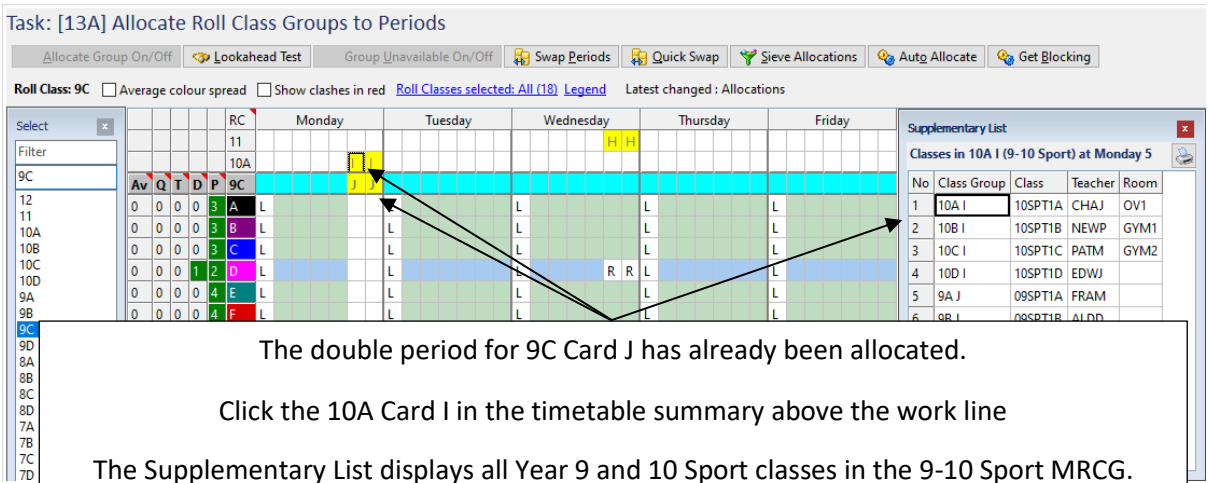




Allocate the double period for 10A Card I (9-10 Sport) to Period 5 and 6 on Monday

The allocated cards are displayed on a new row in the timetable summary, corresponding to the first listed card in the MRCG.

Select Roll Class **9C**

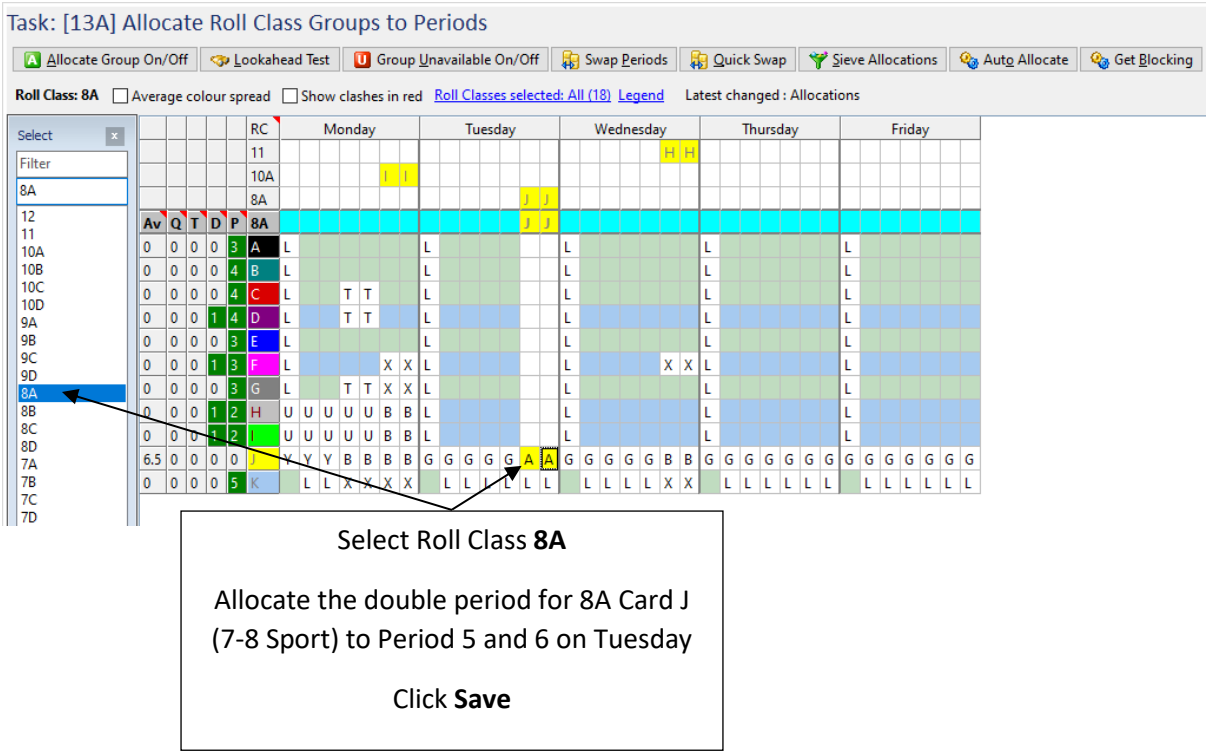


The double period for 9C Card J has already been allocated.

Click the 10A Card I in the timetable summary above the work line

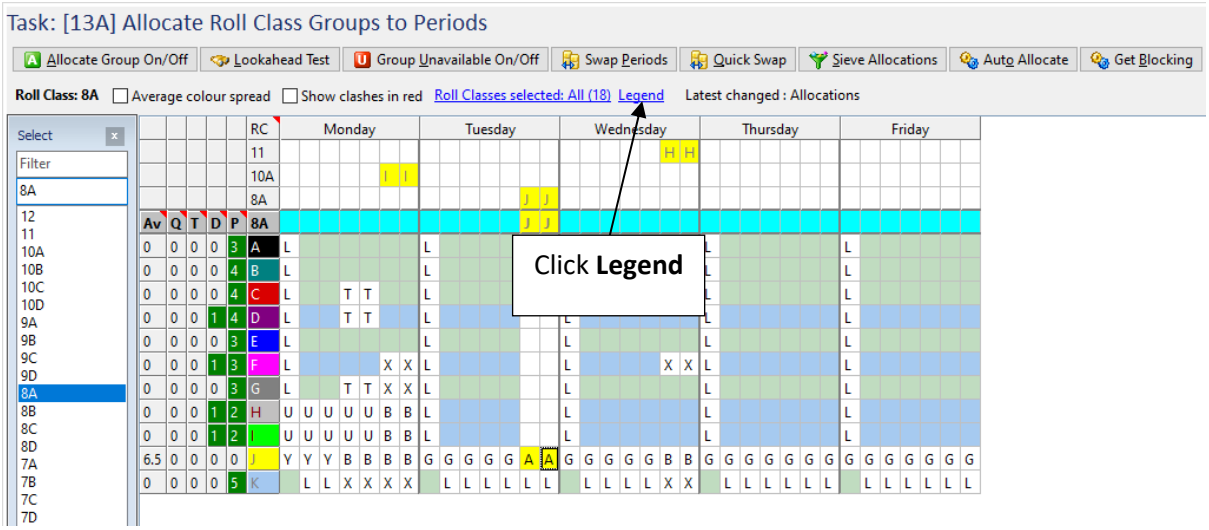
The Supplementary List displays all Year 9 and 10 Sport classes in the 9-10 Sport MRCG.

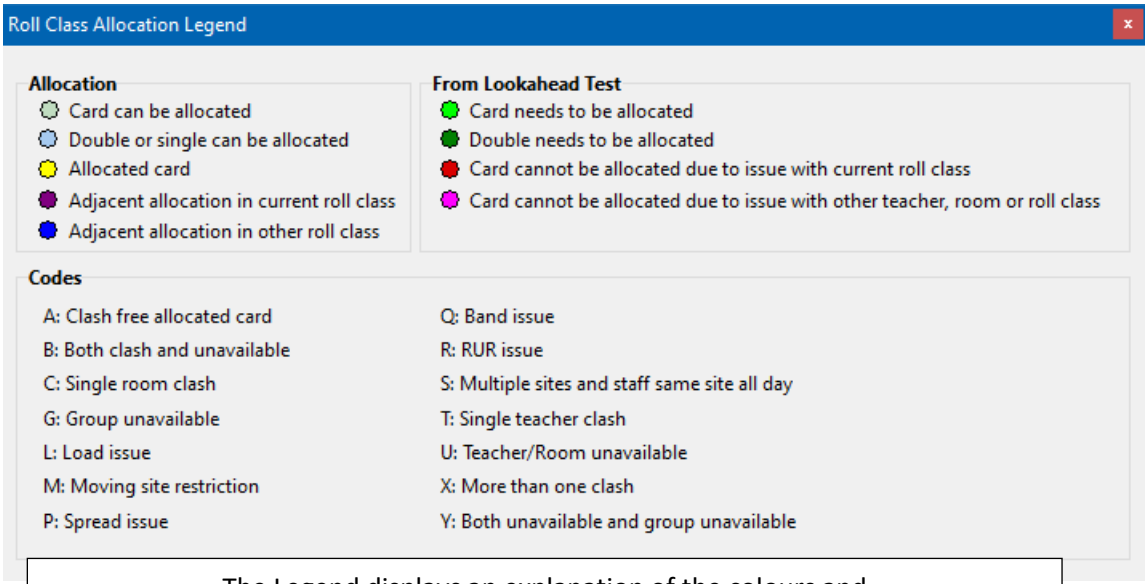
If two or more Roll Classes have allocations in the same MRCG and no other classes have been allocated, only the first Roll Class of the MRCG is displayed in the timetable summary.



LEGEND

There are now various letters displayed on the Roll Class Allocations screen following the part time teacher, Meetings and Groups Unavailable allocations. The Legend provides further explanation.





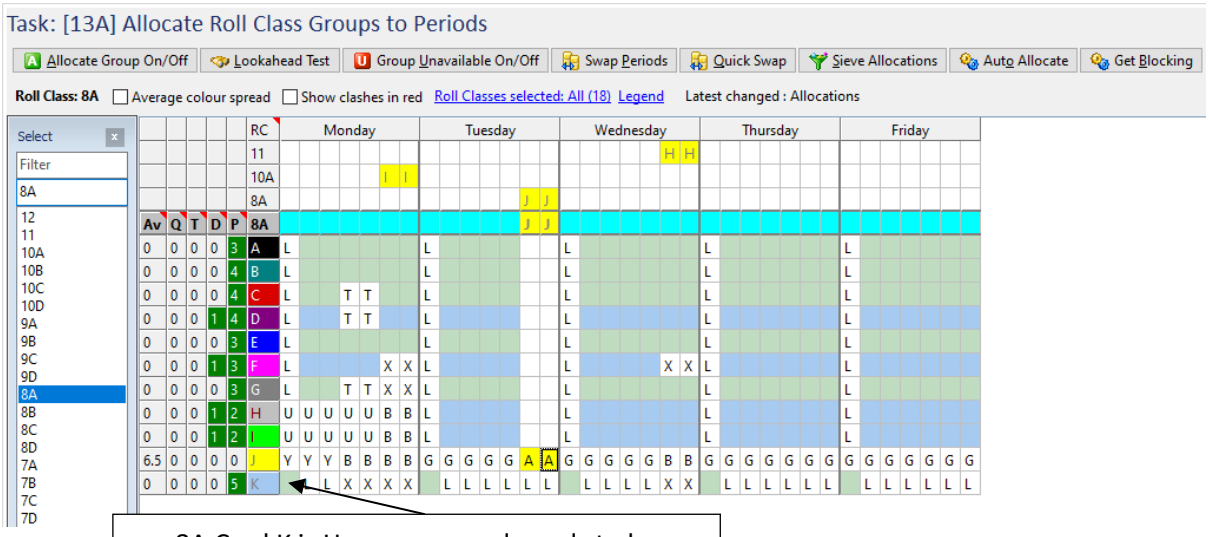
The Legend displays an explanation of the colours and letter codes that can appear on [13A] Roll Class Allocations.

The Legend can be moved around the main screen during the timetabling process.

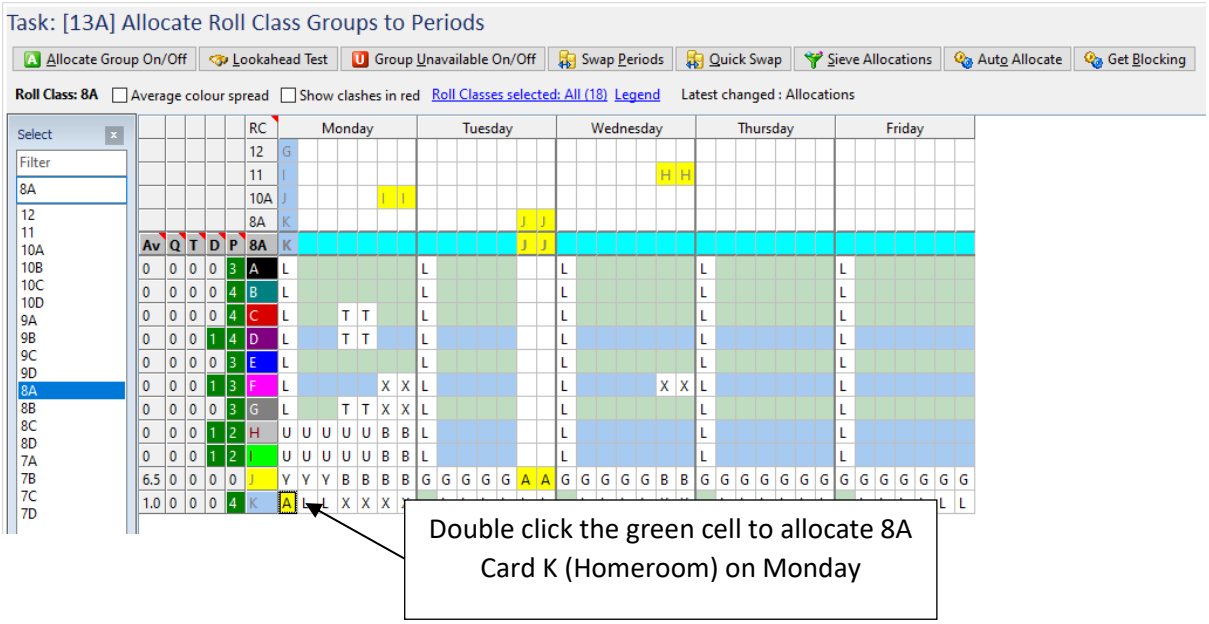
Close the Legend

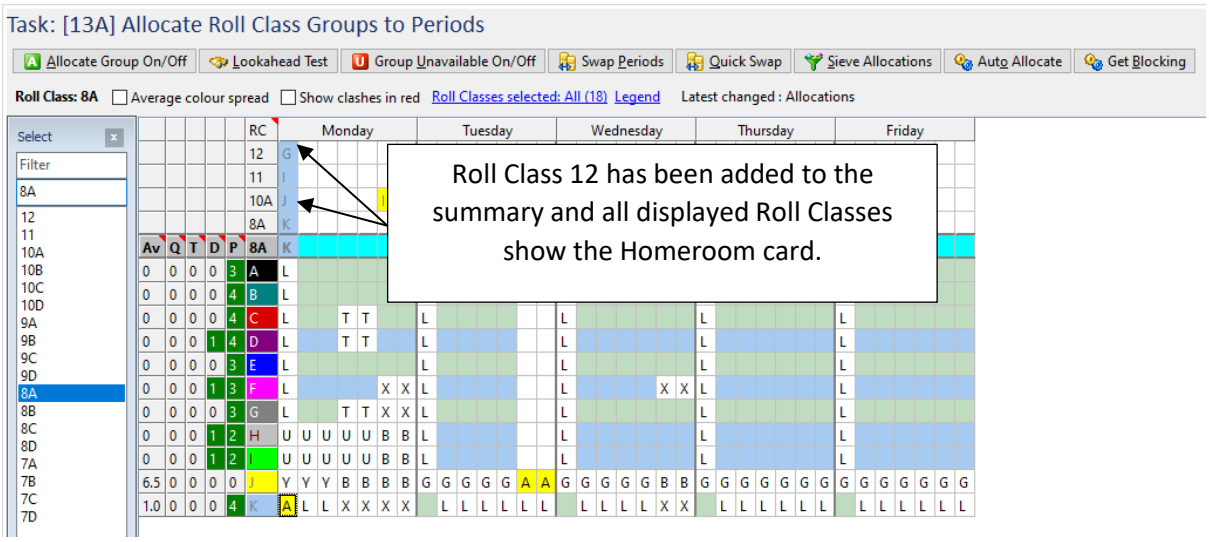
ALLOCATE MUST CLASSES - HOMEROOM

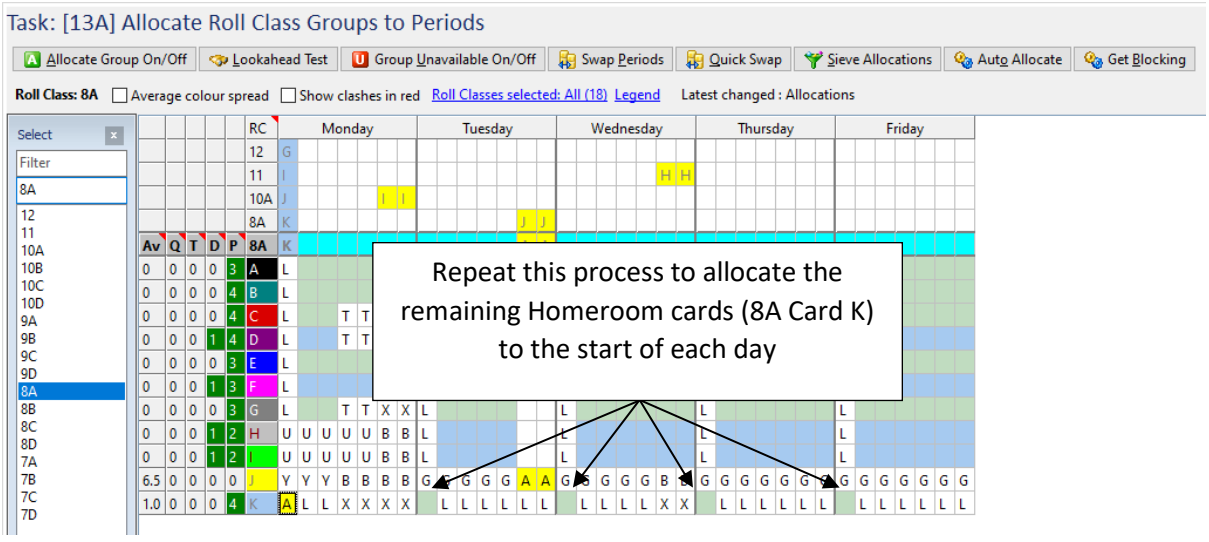
The Homeroom MRCG was created to include all Roll Classes and has a period load value of 0.20. In this example, Homeroom must be allocated in the first time slot of each day as defined in [1C] Period Details. This allocation can be done in any Roll Class that is included in the MRCG.

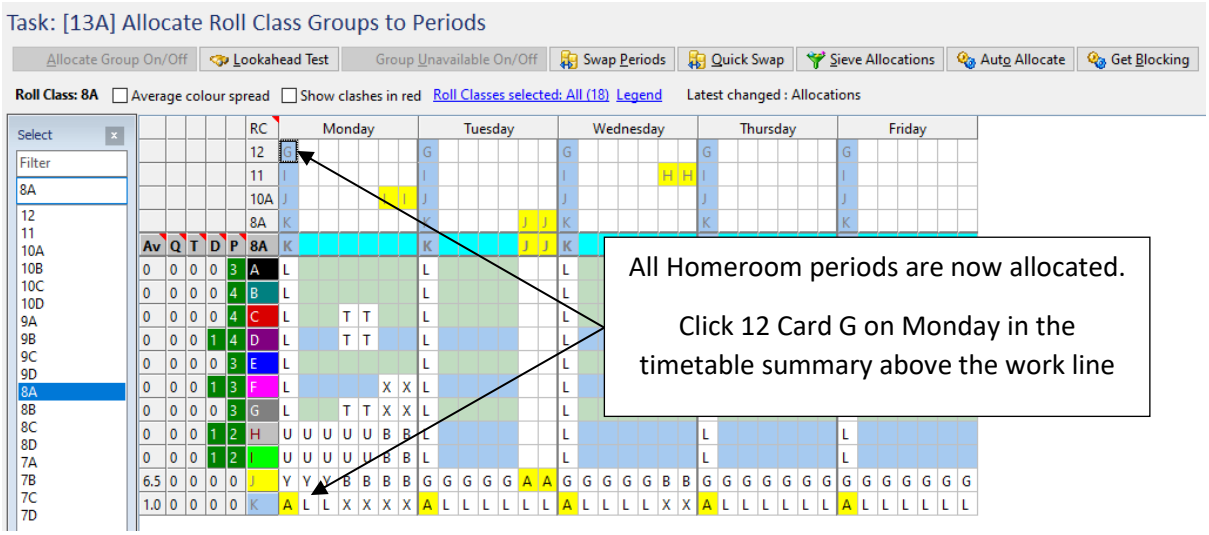


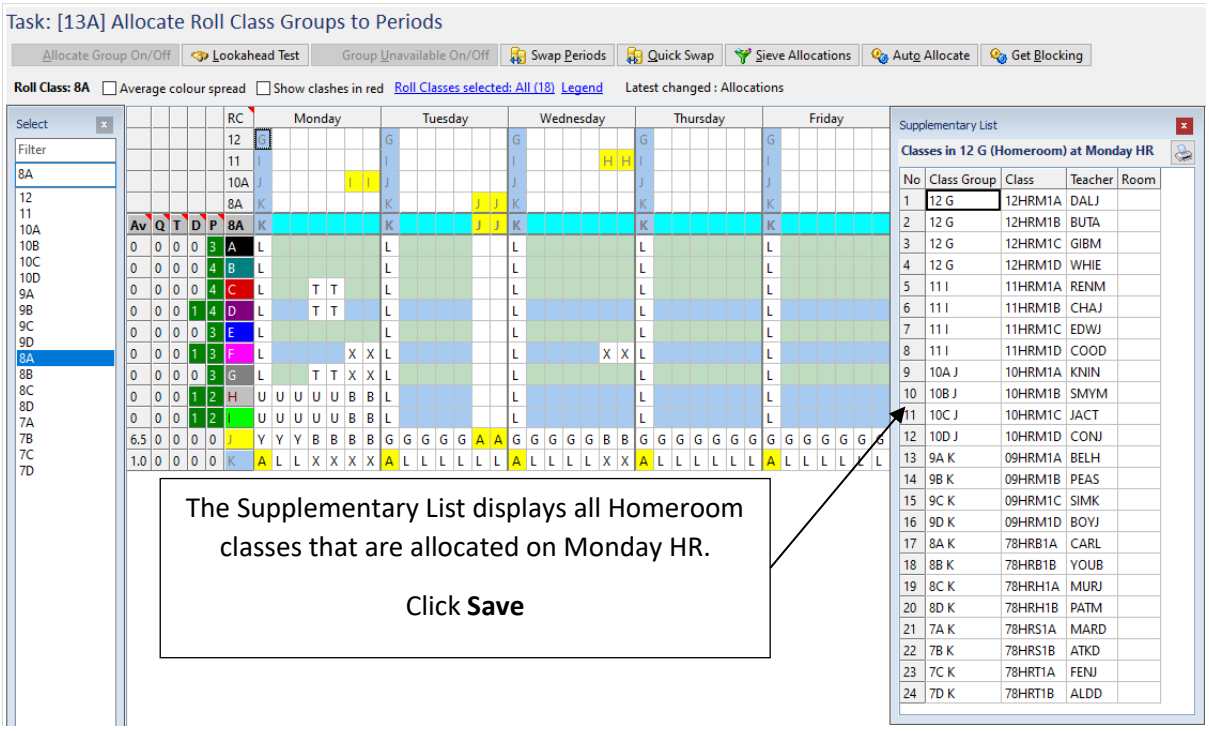
8A Card K is Homeroom and needs to be allocated at the start of each day.
There are 5 Homeroom periods to be allocated.


Task: [13A] Allocate Roll Class Groups to Periods
Allocate Group On/Off
Lookahead Test
Group Unavailable On/Off
Swap Periods
Quick Swap
Sieve Allocations
Auto Allocate
Get Blocking
Roll Class: 8A
Average colour spread
Show clashes in red
Roll Classes selected: All (18)
Legend
Latest changed : Allocations
Monday
Tuesday
Wednesday
Thursday
Friday
Double click the green cell to allocate 8A Card K (Homeroom) on Monday


Task: [13A] Allocate Roll Class Groups to Periods
Roll Class 12 has been added to the summary and all displayed Roll Classes show the Homeroom card.


Task: [13A] Allocate Roll Class Groups to Periods
Repeat this process to allocate the remaining Homeroom cards (8A Card K) to the start of each day





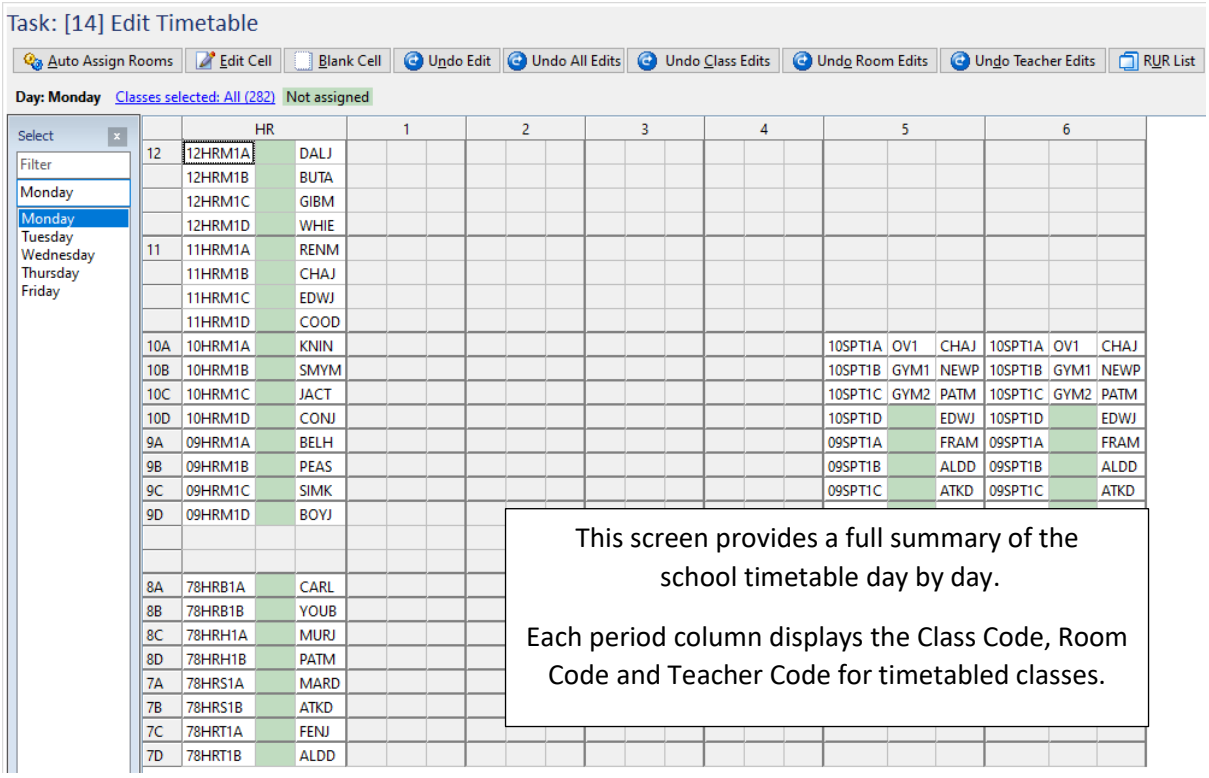
All classes that are required in specific periods have now been allocated.

VIEW PARTIALLY COMPLETED TIMETABLE

In this example, the partially completed timetable will be viewed on [14] Edit Timetable. There are a range of functions accessible on this screen which will be discussed in a later lesson.

The process of timetable construction does not occur on this screen.

On the Task Tree select:
[14] Edit Timetable



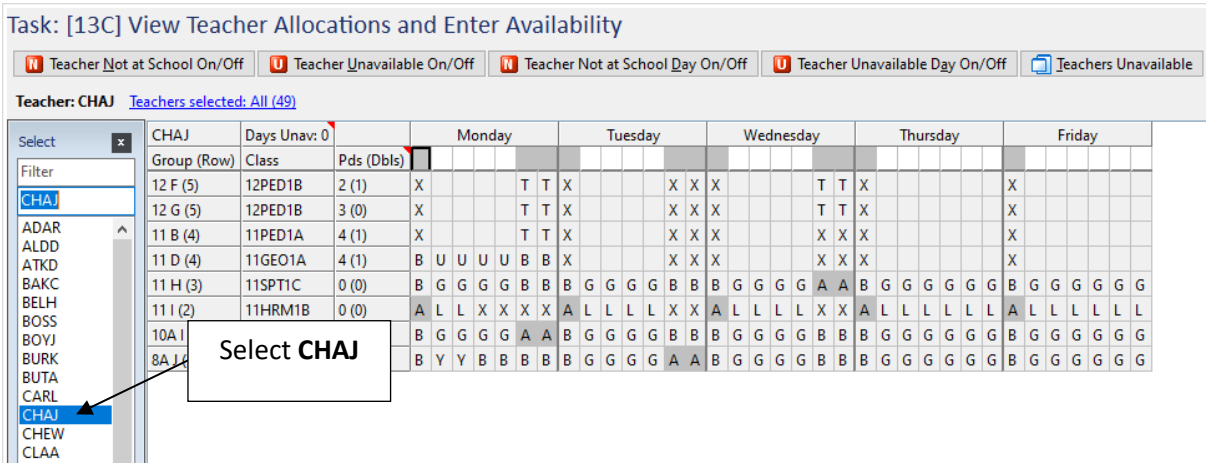
Only classes allocated on the timetable are displayed. At this point, the Edit Timetable screen displays Homeroom and Sport classes.

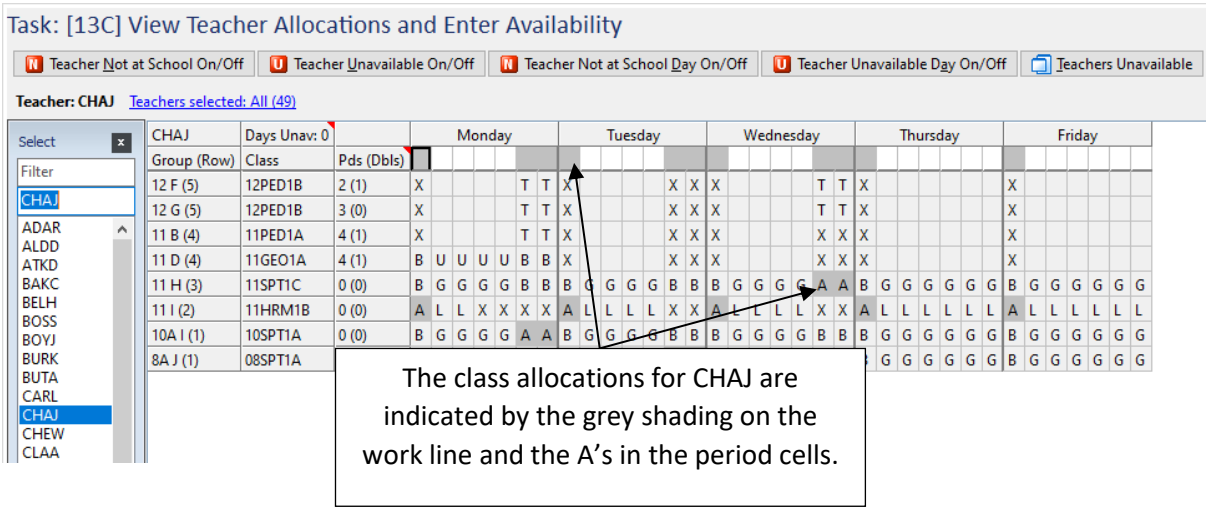
ENTER TEACHER UNAVAILABLE CONSTRAINTS

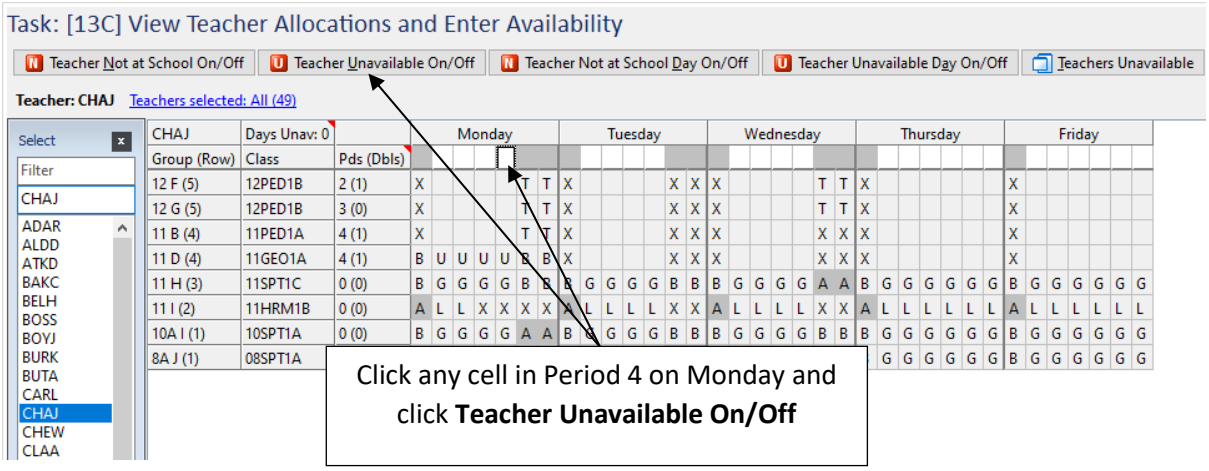
As previously stated, teachers can be made Unavailable (U) or Not at school (N) for individual periods or full days. The constraint information can be entered before or during timetable construction.

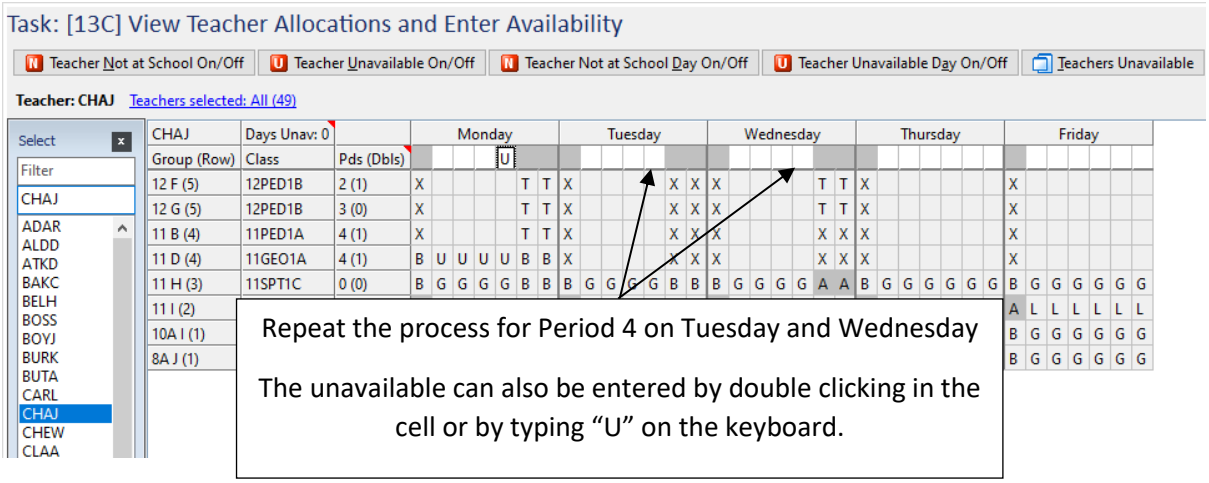
In this example, Judy Chappell (CHAJ) is the Sports Coordinator and must be unavailable in Period 4 on Monday, Tuesday and Wednesday to allow for organisation of the Sports afternoon programs.

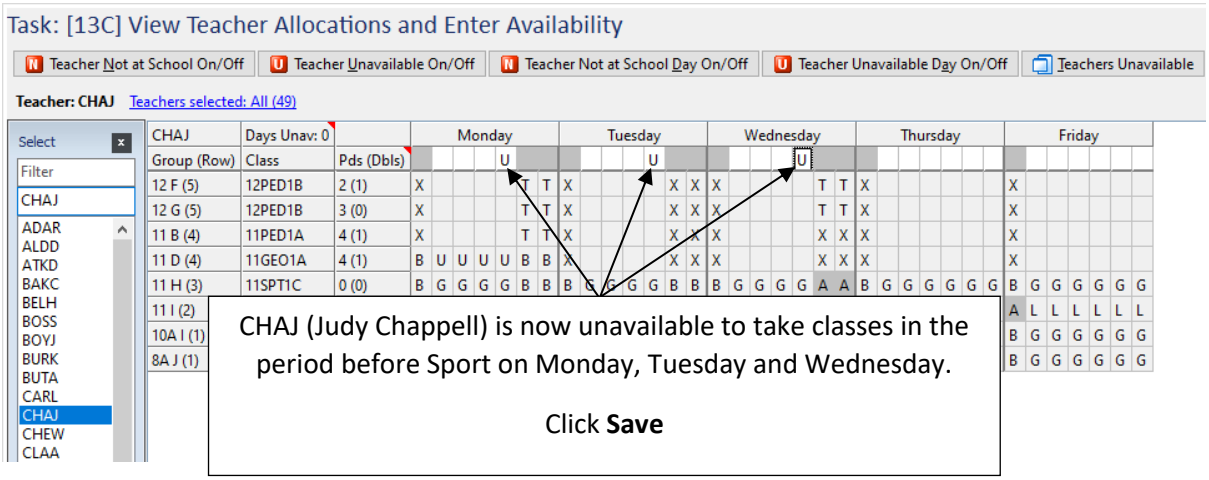
On the Task Tree select:
[13C] Teacher Allocations



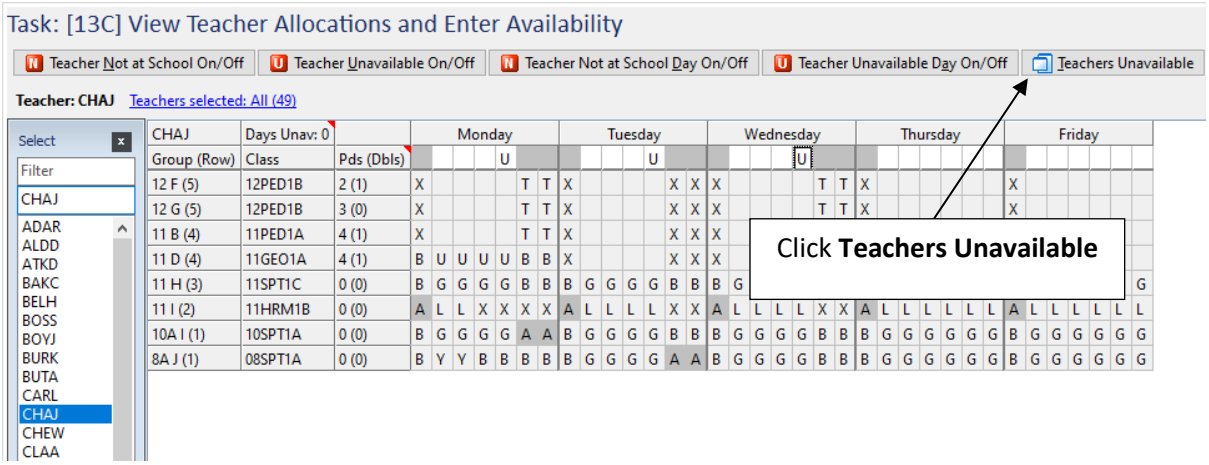


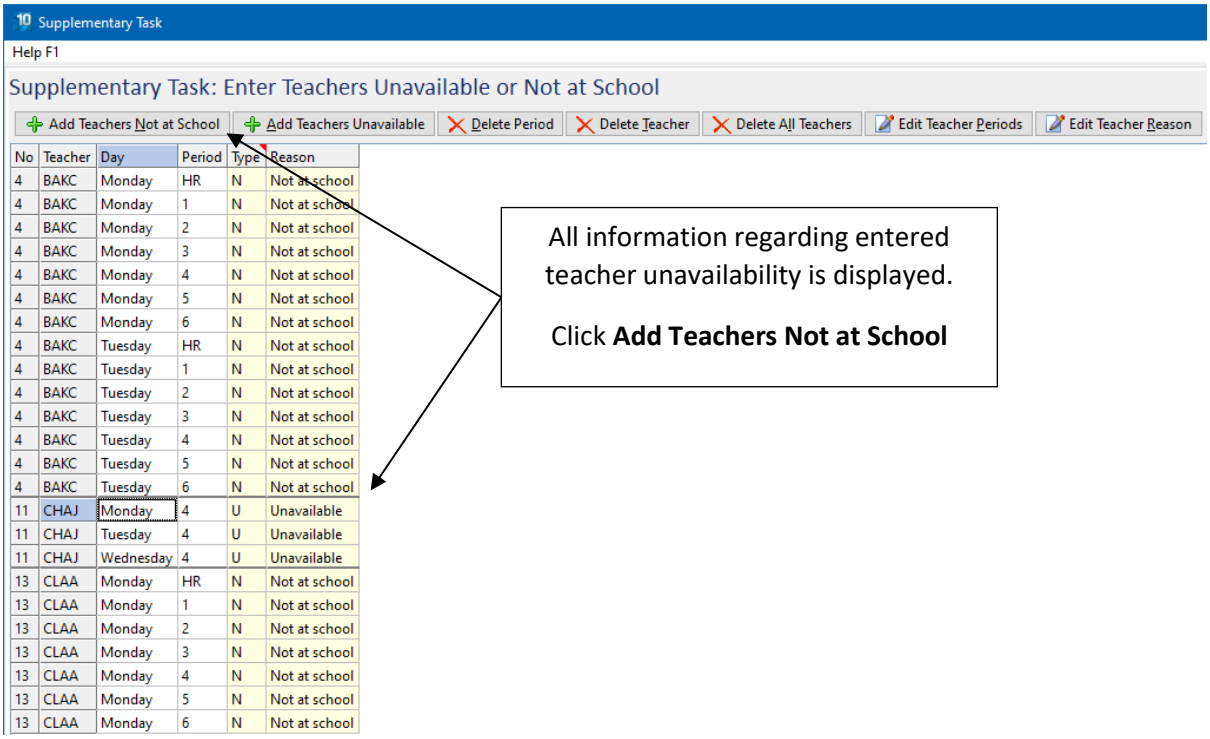

Task: [13C] View Teacher Allocations and Enter Availability
Teacher Not at School On/Off
Teacher Unavailable On/Off
Teacher Not at School Day On/Off
Teacher Unavailable Day On/Off
Teachers Unavailable
Teacher: CHAJ
Teachers selected: All (49)
Click any cell in Period 4 on Monday and click **Teacher Unavailable On/Off**

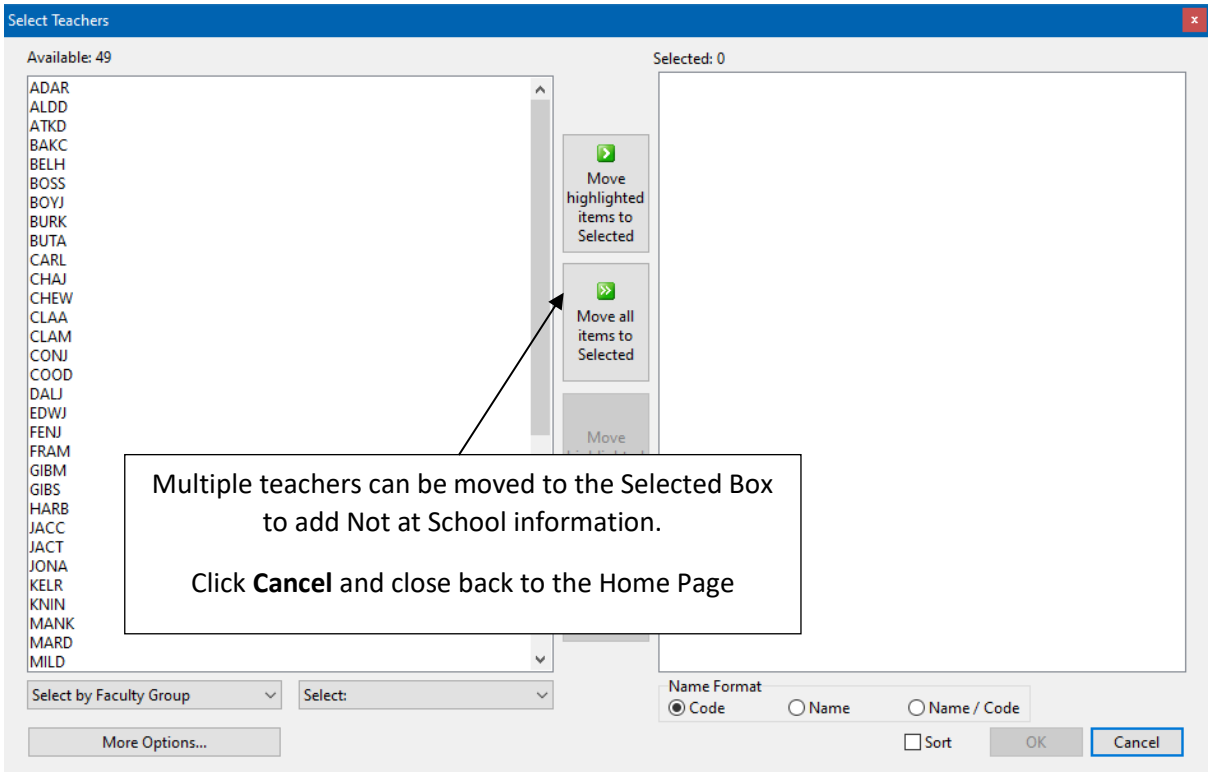

Task: [13C] View Teacher Allocations and Enter Availability
Teacher Not at School On/Off
Teacher Unavailable On/Off
Teacher Not at School Day On/Off
Teacher Unavailable Day On/Off
Teachers Unavailable
Teacher: CHAJ
Teachers selected: All (49)
Repeat the process for Period 4 on Tuesday and Wednesday
The unavailable can also be entered by double clicking in the cell or by typing “U” on the keyboard.

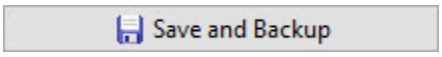

Task: [13C] View Teacher Allocations and Enter Availability
Teacher Not at School On/Off
Teacher Unavailable On/Off
Teacher Not at School Day On/Off
Teacher Unavailable Day On/Off
Teachers Unavailable
Teacher: CHAJ
Teachers selected: All (49)
CHAJ (Judy Chappell) is now unavailable to take classes in the period before Sport on Monday, Tuesday and Wednesday.
Click **Save**

Alternatively, Teachers Unavailable can be used to enter information for multiple teachers at the same time.









Save and backup the file as Lesson 11.tfx