DENTAL CHARTING

Dental charting is an essential element of the role of a Dental Nurse. The National Examining Board for Dental Nurses (NEBDN) acknowledges that there are a number of systems and software used to record charting. It also recognises that there are local and regional differences in registering patient details. The following notations are to be used when completing or interpreting a written chart for the National Diploma Examination.

A chart is a diagrammatic representation of the teeth showing all the surfaces of the teeth. The charts in the examination will be used to show:

- Teeth present
- Teeth missing
- Work to be carried out
- Work completed
- Surfaces with cavities and restorations etc.

When charting, the mouth is looked on as being a flat line. The diagram is viewed, as you would examine the patient’s mouth.

**Zsigmondy-Palmer Notation**

<table>
<thead>
<tr>
<th>Right</th>
<th>Left</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 7 6 5 4 3 2 1</td>
<td>1 2 3 4 5 6 7 8</td>
</tr>
<tr>
<td>8 7 6 5 4 3 2 1</td>
<td>1 2 3 4 5 6 7 8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Right</th>
<th>Left</th>
</tr>
</thead>
<tbody>
<tr>
<td>e d c b a</td>
<td>a b c d e</td>
</tr>
<tr>
<td>e d c b a</td>
<td>a b c d e</td>
</tr>
</tbody>
</table>
Forensic Notation

Most charts have an inner and outer grid. NEBDN has introduced a new grid, which will make clear the work that has been completed in the mouth and the work which needs to be done. The inner grid is present for work already present in the mouth. The outer grid is for work to be carried out.

An example of the grid is given below:
Tooth Surfaces

In order to complete the chart accurately candidates should be able to identify and note the correct surfaces of teeth. These are:

Definitions

- **Incisal**: the biting edge of the incisors and canines
- **Occlusal**: the biting surfaces of premolars and molars
- **Mesial**: the surface of any tooth nearest to the mid-line of the arch
- **Distal**: the surface of any tooth furthest from the mid-line of the arch
- **Buccal**: the surface facing the cheeks (molars and premolars)
- **Labial**: the surface facing the lips (incisors and canines)
- **Palatal**: the surface facing the palate of all upper teeth
- **Lingual**: the surface facing the tongue of all lower teeth
- **Cervical**: the part of the tooth next to the gingival margin
ACCEPTED NOTATIONS – PREMOLARS AND MOLARS

UPPER RIGHT
- Missing
- Preventive Resin Restoration
- Tooth Drifting Distally
- Bridge Abutment

UPPER LEFT
- To Be Extracted
- Work to be carried out

LOWER RIGHT
- UE
- Distal – Occlusal Temporary Dressing
- Mesial Restoration
- Distal Restoration
- Occlusal – Buccal Cavity

LOWER LEFT
- TEM
- GI
- PE
- Recently Extracted
- Work to be carried out

UPPER RIGHT
- Unerupted
- Distal Occlusal Gold Inlay
- Partially Erupted
- Mesial Cavity

UPPER LEFT
- BA
- BP
- Full Gold Crown
- Present status and work completed

LOWER RIGHT
- DISTAL
- Occlusal
- Buccal

LOWER LEFT
- Mesi-al
- Complete
- Denta
- Crown

Dental Charting V0.5 July 2020
Example of Zsigmondy-Palmer Notation

a. Upper right second molar has a mesio-occlusal cavity
b. Upper right first molar has a disto-occlusal temporary dressing
c. Upper right first premolar is for extraction
d. Upper right canine has a buccal restoration
e. Upper right central incisor is an abutment for a cantilever resin retained (Maryland) bridge
f. Upper left central incisor is a resin retained (Maryland) bridge pontic
g. Upper left lateral incisor has a fracture on the incisal edge which requires treatment
h. Upper left second premolar needs a root filling
i. Upper left second molar has preventive resin restoration (PRR) occlusally
j. Upper left third molar has a fissure sealant restoration
k. Lower left third molar has been recently extracted
l. Lower left first molar has a lingual restoration to be replaced
m. Lower left first premolar has a bonded porcelain crown
n. Lower right lateral incisor has a mesial restoration and a separate distal cavity
o. Lower right first premolar is missing
p. Lower right second premolar has rotated mesially
q. Lower right first molar has a MOD porcelain inlay
r. Lower right second molar has a full restoration gold crown
s. Lower right third molar is partially erupted
FEDERATION DENTAIRE INTERNATIONAL NOTATION (FDI) TWO DIGIT CHARTING SYSTEM

In this system the quadrant symbol is replaced by a number. The quadrant number is the first digit while the second number identifies the individual tooth.

**Permanent dentition**

1 for upper right  
2 for upper left  
3 for lower left  
4 for lower right

<table>
<thead>
<tr>
<th>18</th>
<th>17</th>
<th>16</th>
<th>15</th>
<th>14</th>
<th>13</th>
<th>12</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>48</td>
<td>47</td>
<td>46</td>
<td>45</td>
<td>44</td>
<td>43</td>
<td>42</td>
<td>41</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>55</th>
<th>54</th>
<th>53</th>
<th>52</th>
<th>51</th>
</tr>
</thead>
<tbody>
<tr>
<td>61</td>
<td>62</td>
<td>63</td>
<td>64</td>
<td>65</td>
</tr>
<tr>
<td>85</td>
<td>84</td>
<td>83</td>
<td>82</td>
<td>81</td>
</tr>
<tr>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>71</td>
<td>72</td>
<td>73</td>
<td>74</td>
<td>75</td>
</tr>
</tbody>
</table>

**Deciduous dentition**

5 for upper right  
6 for upper left  
7 for lower left  
8 for lower right

<table>
<thead>
<tr>
<th>55</th>
<th>54</th>
<th>53</th>
<th>52</th>
<th>51</th>
</tr>
</thead>
<tbody>
<tr>
<td>61</td>
<td>62</td>
<td>63</td>
<td>64</td>
<td>65</td>
</tr>
<tr>
<td>85</td>
<td>84</td>
<td>83</td>
<td>82</td>
<td>81</td>
</tr>
<tr>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>71</td>
<td>72</td>
<td>73</td>
<td>74</td>
<td>75</td>
</tr>
</tbody>
</table>
Example of FDI Notation

a. 18 is partially erupted  
b. 17 has an occlusal restoration  
c. 16 has an occluso-palatal filling  
d. 14 is missing and the gap has closed  
e. 13 has a porcelain jacket crown in place  
f. 12 has a fracture of the incisal edge which requires treatment  
g. 21 needs distal and palatal restorations  
h. 24 is root filled with an occlusal restoration  
i. 25 has a mesial-occlusal restoration present  
j. 26 to be extracted  
k. 28 is unerupted  
l. 38 is missing  
m. 37 has an occlusal cavity  
n. 34 has a full gold crown  
o. 32 has a distal and labial restorations  
p. 41 has mesial and lingual cavities  
q. 44 has a mesial-occlusal-buccal cavity  
r. 48 has been recently extracted
Basic Periodontal Examination (BPE)

This index is measured using the WHO (BPE) probe. The probe is introduced into the gingival sulcus and a light probing pressure is used around the buccal and then lingual/palatal surfaces. The mouth is divided into sextants (no 8’s) represented by a single box chart for each sextant.

<table>
<thead>
<tr>
<th>BPE Code</th>
<th>Criteria</th>
<th>Probing Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Healthy periodontal tissues No calculus / overhangs No bleeding on probing</td>
<td>Pockets less than 3.5mm First Black Band completely visible</td>
</tr>
<tr>
<td>1</td>
<td>Bleeding on probing No calculus / overhangs</td>
<td>Pockets less than 3.5mm First Black Band completely visible</td>
</tr>
<tr>
<td>2</td>
<td>Supra or Subgingival calculus or plaque retention factor (overhang)</td>
<td>Pockets less than 3.5mm First Black Band completely visible</td>
</tr>
<tr>
<td>3</td>
<td>First black band partially visible</td>
<td>Pockets 3.5 – 5.5mm Black band partially visible</td>
</tr>
<tr>
<td>4</td>
<td>First black band not visible</td>
<td>Black band not visible deep pocket of more than 6mm</td>
</tr>
<tr>
<td>*</td>
<td>Detection of a furcation</td>
<td>Furcation involvement</td>
</tr>
</tbody>
</table>

Example:

```
3  1  2
3  1  4 *
```
## ERUPTION DATES

### Deciduous Dentition

<table>
<thead>
<tr>
<th>Tooth</th>
<th>Letter</th>
<th>Upper eruption date months</th>
<th>Lower eruption date months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central incisor</td>
<td>A</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Lateral incisor</td>
<td>B</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Canine</td>
<td>C</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>First molar</td>
<td>D</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Second molar</td>
<td>E</td>
<td>29</td>
<td>27</td>
</tr>
</tbody>
</table>

### Permanent Dentition

<table>
<thead>
<tr>
<th>Tooth</th>
<th>Letter</th>
<th>Upper eruption date years</th>
<th>Lower eruption date years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central incisor</td>
<td>1</td>
<td>7 to 8</td>
<td>6 to 7</td>
</tr>
<tr>
<td>Lateral incisor</td>
<td>2</td>
<td>8 to 9</td>
<td>7 to 8</td>
</tr>
<tr>
<td>Canine</td>
<td>3</td>
<td>10 to 12</td>
<td>9 to 10</td>
</tr>
<tr>
<td>First premolar</td>
<td>4</td>
<td>9 to 11</td>
<td>9 to 11</td>
</tr>
<tr>
<td>Second premolar</td>
<td>5</td>
<td>10 to 11</td>
<td>9 to 11</td>
</tr>
<tr>
<td>First molar</td>
<td>6</td>
<td>6 to 7</td>
<td>6 to 7</td>
</tr>
<tr>
<td>Second molar</td>
<td>7</td>
<td>12 to 13</td>
<td>11 to 12</td>
</tr>
<tr>
<td>Third molar</td>
<td>8</td>
<td>18 to 25</td>
<td>18 to 25</td>
</tr>
</tbody>
</table>